COUNTY BOROUGH OF BOLTON



ANNUAL REPORT

OF THE

Medical Officer of Health

FOR THE YEAR ENDED

31st December, 1962

A. I. ROSS, M.D., D.P.H.,
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HEALTH DEPARTMENT, CIVIC CENTRE, BOLTON
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HEALTH COMMITTEE, 1962-63

The Mayor (Alderman John A. Childs, J.P.)

Chairman: Alderman John A. Childs, J.P.

Vice-Chairman: Councillor W. Glynn

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Alderman P. Lowe, J.P.

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Co-opted Members:

Dr. B. Thornley

Mr. W. Crumblehulme

Mr. A. G. W. Smith

Sub-Committees

Personal Services

Baths and Ambulance

Insanitary Areas and Premises

Provision of Dustbins

Appointment of Staff

Smoke Control Areas—Financial Assistance

National Assistance Act, 1948. (Section 47)

Slum Clearance

Appointment of School Medical and Dental Staff

Compensation for Trade Disturbance

INTRODUCTION

In 1962 the Ministry of Health issued circular number 2,62 on the Development of the Local Authority Health and Welfare Services. The circular pointed out that the report "A Hospital Plan for England and Wales" published that year, emphasised that where illness or disability could be forestalled by preventive measures, care at home and in the community, rather than in hospital, should always be the aim except where there is a need for diagnosis, treatment and care of a type which only a hospital can provide. The circular went on to state that the local authority services needed to be planned for the same period ahead as the hospital service and the Minister asked the Council to review its health and welfare services and to draw up a plan for developing them over the next ten years. The plan would need to lock with the plans of the hospital authorities and consultations should take place with them, with the Executive Council and the Local Medical Committee.

The Report to the Health Committee on the Development of the Bolton Health Services has been included in Part II of this report. An important factor in preparing the plan was the expected increase in the number of old people in Bolton, from 19,400 in 1960 to 22,600 in 1970, and to almost 25,000 in 1975. To keep pace with the growing number of old folk it is most essential that the number of home helps should rise from the present number of 105 to 130 in 1972. More midwives, homes nurses and mental welfare workers are also envisaged in the report. Two additional clinics are planned in the Lever Edge Lane district and in the Halliwell area. At least three hostels for mental health patients will be necessary, one for old folk and two for younger patients. The preparation of the Ten Year Plan was a most useful exercise in reviewing different aspects of our work and in trying to see what lay ahead. Like all plans it will undoubtedly be subject to change.

In considering the statistics of births and deaths, one very distressing figure was the 98 deaths due to cancer of the lung and bronchus. This is an astonishing and frightening figure and is a most substantial increase, the average number of deaths in the five years 1952 to 1956 being 67.6. Similar evidence was obtained from the mass miniature radiography survey where there were 2.29 cases of lung cancer per thousand men examined in 1962 compared too 0.64 in 1952. In spite of the very clear proof that excessive cigarette smoking produces lung cancer, sales of cigarettes remain at a very high level. Undoubtedly this serious epidemic has not reached its peak and unless there is a considerable change in the smoking habits of Bolton's population, the number of deaths will inevitably increase year by year. The public have the remedy in their own hands.

The epidemic of smallpox in the north-east of England and Wales produced a very considerable increase of work in the department although there were no cases of smallpox within many miles. At first, an attempt was made to vaccinate only where it was thought to be medically necessary, that is, the contacts of cases of smallpox, but it soon became clear that adults who had no association with areas where smallpox was occurring and who were unlikely to have such an association wished to be vaccinated. In view of the public demand, special clinics were set up, and vaccinations took place in the Health Department on every day of the week. In addition, a considerable amount of time was taken up in dealing with inquiries from individuals who were obtaining goods or sending goods to areas where there were cases or who were themselves considering going there. The great demand by adults for smallpox vaccination contrasts with the relatively poor response from adults for poliomyelitis vaccination—a very much more necessary protective measure.

In the care of young children, a continuing measure has been the use of the "At Risk" and Handicapped Register. Information is obtained from hospitals and domiciliary midwives about those children whose mothers have been ill during the pregnancy, where the confinement was difficult or where there has been trouble after the baby was born. Health visitors pay these children special attention, their development is reviewed periodically, and all are tested at an early age for deafness. The Handicapped Register is a register of young children who suffer from physical or mental handicaps and who may require special medical or educational help. Here again, these children are given special attention by the department. In the care of these children, considerable help was received from the Consultant Paediatrician, Dr. W. Dickinson, who runs a clinic in the Civic Centre.

We are now fortunate in having an adequate staff of domiciliary midwives. The improved "off-duty" on the introduction of the night rota scheme has undoubtedly helped in this. As the number of births continues to rise it is most important that sufficient domiciliary midwives are available.

During the year there have been important developments in improved co-operation between general practitioners and health visitors. These follow the recommendations of a joint circular of the Ministry of Health and Ministry of Education which considered that health visitors could, with advantage, work in association with general practitioners, particularly in regard to observation of mothers and babies, routine visiting of the chronic sick and the elderly, and giving general supervision to families with medical and social problems. Discussions on this subject took place at the Local Medical Committee and information was circulated in the Weekly Information Sheet to general practitioners. At the end of the year health visitors were visiting regularly weekly in their surgeries a total of twenty-five doctors. In January the establishment of health visitors was amended by the deletion of the post of Centre Superintendent, a reduction by three in the number of health visitors, and the addition of four

posts designated Group Advisers. These Group Advisers provide the general grade of health visitor with professional support. They hold regular discussions with their groups and are most useful in disseminating new ideas among the staff.

Immunisation and vaccination continue to be a most important part of the preventive work undertaken in the department. In December the Ministry of Health recommended that smallpox vaccination should be deferred until babies were sixteen months of age because of possible complications during the first year of life. This was adopted. Unfortunately it is likely to lead to a considerable reduction in the number of babies who are vaccinated.

We have now been using triple antigen—for diphtheria, whooping cough and tetanus—in Bolton for six years and a large number of children are therefor immune to tetanus. It is important that the Casualty Department of the Bolton Royal Infirmary should have this information, and after trials of various methods it was agreed that the Infirmary should be supplied with a record card of each child immunised against tetanus. In future such cards will be sent to the hospital monthly. This will ensure that many children who receive treatment for cuts and abrasions at the hospital will no longer have to receive anti-tetanic serum which, in some cases, may have unpleasant after-effects.

Continued improvement took place in the number of sites available to the department for the display of posters on health education. All Health Department buildings now have well-designed, substantial poster boards both inside and out. Posters are changed regularly according to a plan which is drawn up at the end of each year for the following year.

The Chiropody Service continues to grow. A substantial increase took place in the domiciliary service which is available on their doctor's recommendation to those old folk who cannot travel to the clinic.

The Home Help department remained under some strain during the year. While admission of old people to hospital and Part III accommodation remains difficult, and the number of old folk increases, it is most important that the Home Help department be kept up to strength. As mentioned earlier, substantial increases of staff will be necessary during the next few years.

Turning to mental health, it is hoped that the new hostel for fifty elderly people will be ready for occupation towards the end of 1963. It is situated on a very pleasant site on Chorley New Road and will be most valuable. During the winter difficulties were experienced at the junior training centre in Cotton Street. This is a prefabricated building of flimsy construction, imperfectly insulated and difficult to heat. It is impossible to instal additional electric or gas heaters and it seems likely that the building will have to be replaced very soon. The position is being examined. The special care unit for looking after mentally subnormal individuals who are virtually untrainable did a very good job indeed. But for it many of these patients would undoubtedly have to be in hospital. Their parents are very appreciative of the help given.

Both notifications and deaths from pulmonary tuberculosis continued to decrease, notifications numbering sixty-two compared to eighty-two last year, and deaths seven compared to fifteen; a very satisfactory position.

The incidence of venereal disease was not so satisfactory. Although there was a reduction in the number of cases of gonorrhoea, in patients under the age of nineteen there were seventeen compared with sixteen in the same age group last year. In his report on this subject, Dr. Philip S. Silver states:

"It would appear, therefore, that there has been a satisfactory decline in the number of cases of gonorrhoea although the incidence in the teenage group remains about the same. The complete lack of knowledge about venereal disease and the damage that it may cause is still very apparent and this suggests that further publicity is necessary."

On the environmental side, continuous progress was made in smoke control, slum clearance, and food hygiene. Considerable reduction took place in industrial smoke from large-scale improvements at certain premises. At the end of the year, 10,000 premises of various kinds, mainly domestic, were included in smoke control orders. The Ministry of Housing and Local Government asked local authorities to expedite their slum clearance programmes. This was considered in Bolton and a new programme drawn up to provide for the demolition of 3,670 houses by 1966. Particular attention has been given to hygiene in public houses and contamination of beer. Very good co-operation has been obtained from brewery companies and the new method of bacteriological examination developed in conjunction with Dr. G. B. Manning of the Bolton Royal Infirmary Pathological Department will ensure improved hygiene in licensed premises. Some breweries decided voluntarily to stop using economisers which returned beer spillings to the main tank in their houses. Others have agreed that each time a customer is served, a clean glass should be used, and waste beer from trays and glasses will not be served again.

Two striking aspects of food hygiene were the greatly increased numbers of complaints made by members of the public about food stuffs and the very considerable reduction in the number of samples found to be infested with mites or insects or rodent excreta. In 1957, thirty-five per cent of samples were found to be infested compared with only 4.2 per cent in 1962.

Mr. Morris, who had been Borough Analyst from October 1948, retired in July 1962. I should like to thank him for the excellent work he has done during the years and the great help he has been to me personally while I have been Medical Officer of Health. I wish to welcome Mr. Holland, his successor, who took up duty in August 1962. His most interesting report shows the wide range of important work undertaken in a modern analytical department.

In conclusion I should like to thank the staff for their most excellent co-operation, and the Chairman and members of the Committee and the members of the Council for their interest in the work and helpfulness during the year.

arkoss.

Medical Officer of Health

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PRINCIPAL STAFF OF THE HEALTH DEPARTMENT

at 31st December, 1962

	MEDICAL STAFF
Medical Officer of Health	A. I. Ross, M.D., D.P.H.
Deputy Medical Officer of Health	I. S. Macdonald, M.D., D.P.H., D.(Obst.) R.C.O.G.
Assistant Medical Officers of Health and School Medical Officers	Mavis J. Allanson, M.B., Ch.B., D.(Obst.) R.C.O.G. (Part-time) J. T. Carroll, M.B., B.Ch., L.M., D.(Obst.) R.C.O.G., F.R.C.S. (Commenced 6.9.62) Catherine O. L. Holt, M.B., Ch.B., D.(Obst.) R.C.O.G. (Commenced 1.11.62) Eve M. Mawdsley, M.B., Ch.B., D.C.H. Sylvia J. A. Raymond, M.B., Ch.B., D.C.H. Audrey Seddon, M.B., Ch.B., D.(Obst.) R.C.O.G. (Part-time) Dorothy Carlile, M.B., Ch.B. (Resigned 24.6.62) G. C. Galea, M.D., D.(Obst.) R.C.O.G., B.Sc., Ph.Ch. (Resigned 31.10.62) A. Hargreaves, M.B., Ch.B. (Resigned 1.7.62)
	RSING STAFF
Superintendent Nursing Officer	Miss E. M. Richardson, S.R.N., S.C.M., H.V. and Q.N. Certs., D.N., (Lond.)
Deputy Superintendent Health Visitor	Miss A. M. Fraser, S.R.N., S.C.M., H.V.Cert.
НО	ME NURSING
Superintendent	Miss C. M. Ratcliffe, S.R.N., S.C.M., H.V.Cert.
Deputy Superintendent	Mrs. E. Wilson, S.R.N.
λ	AIDWIFERY
Non-Medical Supervisor	Miss C. M. Ratcliffe, S.R.N., S.C.M., H.V.Cert.
Supervisor	Y NURSERIES Miss L. W. Booth, R.S.C.N., S.C.M., H.V.Cert
PUBLIC H	EALTH INSPECTORS
Chief Public Health Inspector	T. Williams, F.R.S.H., M.R.Inst.P.H.H., M.A.P.H.I.
Deputy Chief Public Health Inspector	N. Ryce, M.R.S.H., M.A.P.H.I.
CLE	RICAL STAFF

Chief Administrative Assistant . . . W. Greenhalgh Administrative Assistant W. W. Markland

MENTAL HEALTH SERVICE

Chief Mental Health Officer ... R. A. Johnson

Supervisor—Junior Training Centre Miss E. Dobbin, Dip.N.A.M.H.

Supervisor—Adult Training Centre . . L. Lofthouse, R.N.M.D.

HOME HELP SERVICE

Home Help Organiser Miss O. Brindle

AMBULANCE SERVICE

Superintendent H. Baber (Resigned 20.8.62)

T. R. Walton (Commenced 6.9.62)

ANALYST

Borough Analyst F. Morris, A.M.C.T., F.R.I.C. (Resigned 31.7.62)

G. J. Holland, B.Sc., F.R.I.C., P.A.I.W.E.

(Commenced 20.8.62)

BATHS AND WASHHOUSES

Superintendent A. Markham, M.N.A.B.S.

Moss Street Baths & Washhouse. . Hennon Street Slipper Baths . . . T. Taylor

Rothwell Street Washhouse.. .. A. L. Duckworth

Turkish Baths . . P. F. Casterton

PART I

STATISTICAL INFORMATION

Summary of Statistics

Births

Deaths

Infant Mortality

Deaths from Cancer

SUMMARY OF STATISTICS, 1962

COUNTY BOROUGH OF BOLTON

Position Lat. 53° 35′ N. Long. 2° 27′ W. Elevation above sea level 230 ft. to 1,450 ft. Geological Formation Boulder Clay and Sand over Coal Measures Rainfall (Av. 1887-1962, 45.475″) 45.51″
Geological Formation Boulder Clay and Sand over Coal Measures Rainfall (Av. 1887-1962, 45.475") 45.51"
Rainfall (Av. 1887-1962, 45.475") 45.51"
Area in Acres (Land and Inland Water) 15,279
Fopulation (Census 1921) 178,683
" (Census 1931) 177,250
" (Census 1951) 167,162
,, (Census 1961) 160,740
,, (Estimated Civilian Population, 1962) 160,650
New permanent houses, including flats, certified 185
Existing buildings altered to provide dwelling accommodation 3
Estimated number of houses and flats in the Borough 57,115
Rateable Value at 1st April, 1962 £2,102,834
Rate at 1d. in the £ estimated to produce (1962-63) $f_{8,250}$
Live Birtlis 2,767
Live birth rate per 1,000 population 17.22
Stillbirths 54
Stillbirth rate per 1,000 live and stillbirths 19.14
Total live and stillbirths 2,821
Infant Deaths 67
Infant mortality rate per 1,000 live births—total 24.21
Infant mortality rate per 1,000 live births—legitimate 23.33
Infant mortality rate per 1,000 live births—illegitimate 35.9
Neo Natal mortality rate per 1,000 live births 18.07
Illegitimate live births per cent of total live births 7.05
Maternal deaths (including abortion) 2
Maternal mortality rate per 1,000 live and stillbirths 0.71
Deaths 2,212
*Death Rate (Corrected) 14.87
*Average Death Rate (1953-1962) 14.14
*Heart and Circulation Death Rate 6.74
*Cancer Death Rate 2.51
*Death Rate from diseases of the Respiratory System 2.15
*Pulmonary Tuberculosis Death Rate 0.04
Diarrhoea Death Rate (Deaths under two years per 1,000 live births) 0.36
births) 0.36
ENGLAND AND WALES:
*Birth Rate 18.0
Stillbirth Rate (per 1,000 total births) 18.1
*Death Rate
Infant Mortality (Deaths under one year per 1,000 live births) 21.4
*Per thousand of population

VITAL STATISTICS

Births:

There were 2,767 live births to Bolton residents, 1,417 males and 1,350 females. The live birth rate (corrected) per 1,000 of the population was 17.2.

There has been a substantial increase in the number of live births and in the birth rate in Bolton during the last few years. The following table shows the number of births and the birth rate in each year from 1957 to 1962 inclusive.

	Number of	
Year	Live Births	Rate per 1,000
1957	2,383	14.6
1958	2,514	15.6
1959	2,446	15.2
1960	2,652	16.6
1961	2,675	16.6
1962	2,767	17.2

The increase is in keeping with the experience nationally and appears to be due to earlier marriage and shorter spacing between births. It remains to be seen whether this is a transient phase to be followed by a reduction in the birth rate, or whether there will be an increase in the size of families which would cause the birth rate to remain high.

Of all the live births, 613 (approximately 22 per cent) occurred at home, and approximately 78 per cent in institutions—1,269 in Bolton District General Hospital, 339 in Haslam Maternity Home, 161 in Havercroft Maternity Home, and 309 in Heaton Grange Maternity Home. The remaining births took place in institutions and homes outside Bolton.

There were 189 premature live births.

Stillbirths:

The number of stillbirths was 54, giving a stillbirth rate of 19.1 per 1,000 live and stillbirths.

The causes of the 54 stillbirths which occurred in Bolton in 1962 are given below.

Cause of Death	Number M & F
Chronic disease of circulatory system	2
Haemorrhage without mention of placental condition	8
Toxaemia with convulsions during pregnancy or labour	
(eclampsia)	3
Other toxaemias of pregnancy	1
Cord condition without mention of placental abnormality	5
Placenta praevia	1 1
Premature separation of normally implanted placenta	1 1
Other abnormality of placenta and cord	5
Anencephalus	2
Hydrocephalus	3
Erythroblastosis	2
Maceration, cause not specified	4
Other ill-defined causes	5
Cause unspecified	10
Insufficient information available	2
Total	54

Total Live and Stillbirths:

The total live and stillbirths was 2,821.

Deaths:

There were 2,212 deaths (1,145 males and 1,067 females), giving a corrected death rate of 14.9 per 1,000 of the population.

A total of 674 persons whose usual place of residence was in the county borough died outside the borough; of these, 590 died either in the Bolton District General Hospital or in Townleys Annexe.

Non-residents who died in the area numbered 194.

Summary of the Principal Causes of Death, 1962

Cause of Death	No. of Deaths	Males	Fe- males	0-	1-	5-	15-	25-	45-	65-	75-
Tuberculosis, Respiratory	7	7	_	_	_	_	_	1	1	5	_
,, Other	_	_		_	_	_	_	_	_	_	_
Syphilitic disease	-	-	_	-	-	_	_	_	-	-	-
Diphtheria	-	-	_	_	-	-	_	_	_	_	-
Whooping Cough	_	-	_	_	-	-	-	-	-	-	-
Meningococcal Infections	1	1	-	-	-	-	_	_	_	1	-
Acute Poliomyelitis	-	-	_	-	-	-	-	-	_	-	-
Measles	_	_	_	-	-	_	_	-	-	-	-
Other infective and parasitic											į.
diseases	3	2	1	-	-	_	-	-	2	1	-
Malignant Neoplasm—	72	20	2.4					_		24	1 00
Stomach	73	39 85	34 13	-	_	_	-	2	21	24	26
Lung & Bronchus	40			-	-	-	_	2	56	33	8
Breast Uterus	21	_	40	_	-	_	_	$\frac{2}{2}$	19	11 5	8
Uterus Other malignant and lym-	21		21	_	-	_	_		0)	0
phatic neoplasms	172	81	91			2	_	6	60	56	48
Leukaemia and Aleukaemia	10	7	3	_	1	1		3	4	1	40
Diabetes	18	8	10				_		3	10	5
Vascular lesions of nervous	10	0	10						,	10	
system	323	135	188	_	_	_		7	53	110	153
Coronary disease, angina	386	238	148	_		_	_	ģ	129		123
Hypertension with heart	500	250	1 10						1 20	123	120
disease	44	17	27	-		_	_	_	9	11	24
Other heart disease	196	78	118	_	_	_	1	7	41	44	103
Other circulatory disease	133	66	67	_	_	_	_	2	15	23	93
Influenza	33	18	15	_	-	_	_	2 2	8	6	17
Pneumonia	122	68	54	11	1	_	2	3	11	28	66
Bronchitis	176	115	61	1	1	-	_	_	56	67	51
Other diseases of respiratory											
system	15	10	5	-	- 1	-	-	-	7	2	6
Ulcer of stomach and duo-											
denum	20	10	10	-	_	-	-	- ,	3	12	5
Gastritis, enteritis and diar-											
rhoea	4	1	3	1	-		- 1	_	1	1	1
Nephritis and Nephrosis	14	6	8	_	_	_	1	2	4	2	5
Hyperplasia of Prostate	7	7	_	- 1	-	_	_	_	_	2	5
Pregnancy, childbirth and			_					_			
abortion	2	- 9	2 7	12	_	_	_	2	2	1	-
Congenital malformations Other defined and ill-defined	16	9	/	12	-	-	_	1	2	1	
	167	79	88	40	2	3	3	4	26	35	54
Motor vehicle accidents	24	16	8	40	1	2	2	7	6	33	2
All other accidents	64	27	37	2	1	1	3	6	5	12	34
Suicide	21	14	7		-	- '	3	1	11	16	3
Homicide and Operations of	21	1.4	,					^	1 1		
War	2	1	1	_	_	_	1	1	-	_	_
	_										
			. 0.65								
Totals	2,212	1,145	1,067	67	7	9	13	70	559	638	849
							1				

Deaths from Puerperal Causes:

There were two deaths from puerperal causes during the year, giving a maternal mortality rate of 0.7 per 1,000 live and still births.

Although it is unfortunate to have to record two maternal deaths, it should be remembered that there had been no maternal deaths in the preceding two years.

Infant Mortality:

There were 67 deaths of infants under one year, giving an infant mortality rate of 24.2 per 1,000 live births. The infant mortality rate per 1,000 legitimate live births was 23.3, and illegitimate 35.9. The primary causes of death are shown in the following table:

		Age at Death						
Cause of Death	Under 4 weeks	4 weeks to 3 mths	3 to 6 months	6 to 9 months	9 to 12 months	each cause		
Prematurity	23	-	-	-	_	23		
Congenital malformations	8	2	2	-	1	13		
Pneumonia	2	7	2	1	-	12		
Post-natal asphyxia and Atelectasis	6	-	-	_	_	6		
Birth Injury	6	-	-	-	_	6		
Other Causes	5	1	-	-	1	7		
Totals	50	10	4	1	2	67		

Deaths under Four Weeks:

There were 50 deaths of infants under four weeks, giving a neonatal mortality rate of 18.1 per 1,000 live births. The rate for England and Wales was 15.1.

The following table shows the ages at which death took place:

Cause of Death	0-7 days	8-14 days	15-21 days	22-28 days	Total
Prematurity	20	3	-	_	23
Congenital Malformations	5	1	1	1	8
Pneumonia	1	-	-	1	2
Post-natal Asphyxia and Atelectasis	6	-	-	-	6
Birth Injury	6	-	-	- 6	6
Other Causes	4	-	1	-	5
TOTALS	42	4	2	2	50

Nine of these babies were under $2\frac{1}{2}$ lbs. in weight at birth.

Perinatal Mortality:

The perinatal mortality rate is the number of stillbirths added to the number of infant deaths during the first week of life, expressed as a rate per thousand of total births, both live and still. In 1962 the perinatal mortality rate in Bolton was 34.0 per 1,000 total births.

The following table shows the infant mortality rate, neonatal mortality rate, stillbirth rate, perinatal death rate and the death rate of infants aged one week but under one year, for the last ten years.

								_		
	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962
Infant Mortality Rate	27.9	28.5	25.7	23.9	25.6	27.4	29.0	27.0	19.4	24.2
Neo-natal Mortality Rate	18.9	19.8	14.2	15.9	16.7	20.7	17.2	20.0	11.6	18.1
Stillbirth Rate	23.0	25.0	24.7	26.7	21.8	21.0	16.9	19.6	17.6	19.1
Perinatal Death Rate	39.5	42.0	38.2	42.2	37.5	39.3	29.7	34.0	27.5	34.0
Deaths of infants aged 1 week but under 1 year per 1,000 total births	11.5	12.2	12.9	6.8	10.3	8.6	15.7	12.2	9.2	8.9

Deducting the deaths of the nine babies under $2\frac{1}{2}$ lbs. at birth would give an infant mortality rate of 21.0.

General Discussion - (Infant Mortality and Stillbirths)

The infant mortality rate in Bolton in 1962 was 2.8 per thousand higher than the rate for England and Wales, and the stillbirth rate was 1.0 per thousand higher. This is the familiar pattern, and unfortunately the experience of 1961, when Bolton's infant mortality and stillbirth rates were both below the national rates, must be regarded as exceptional.

There has actually been a reduction in the death rate among children over the age of four weeks, and the increase in the infant mortality rate has arisen from an increase in the number of neonatal deaths, i.e. deaths occurring during the first four weeks of life. This, along with the increase in the stillbirth rate, has meant that the perinatal mortality rate has risen appreciably.

The table on page 19 showing the age distribution of the neonatal deaths and the causes, shows that prematurity is the outstanding cause of death in this period. The table shows that 23 deaths in the neonatal period were due to prematurity, but this understates the problem because three of the six children who died from post-natal atelectasis and asphyxia and two of the six children

who died from birth injuries were premature. One of the five children who died from congenital malformations was also premature, making a total of 29 premature children among 50 neonatal deaths. This is in accordance with the national experience and is not peculiar to Bolton.

In the post-neonatal period after the age of four weeks, pneumonia continues to be the major cause of death, accounting for 10 out of the 17 deaths in this period. Enquiries into deaths in the post-neonatal period are continuing on the lines indicated in my report for 1961.

Deaths from Cancer

Localisation of Disease, Number of Deaths and Rate Per Cent of Total Deaths annually for the past ten years

1962	Rate	3.30	4.43	1.81	0.95	7.77	18.26	2,212
	No.	73	86	40	21	172	404	7
1961	Rate	2.96	3.13	1.41	0.71	7.63	15.84	2,267
	No.	19	71	32	91	173	359	2
1960	Rate	3.02	3.37	1.32	1.02	7.85	16.58	2,051
	No.	62	69	27	21	191	340	
6561	Rate	2.84	3.88	1.56	0.33	8.38	16.99	2,113
	%	09	82	33	7	177	359	
1958	Rate	3.59	3.87	1.32	08.0	8.64	18.22	2,119
	No.	92	82	28	17	183	386	
1957	Rate	2.30	3.77	1.73	0.84	7.89	16.53	2,256
	Z.o.	52	85	39	19	178		7
1956	Rate	2.66	3.51	1.58	98.0	8.29	16.90 373	2,220
	so.	59	78	35	19	184	375	2,
1955	Rate	2.57	2.81	1.78	0.56	7.99	15.71 375	2,138
	No.	55	99	38	12	171	336	2
1954	Rate	2.99	2.90	1.43	0.71	8.35	16.38	2,240
	Š	29	65	32	16	187	367	
1953	Rate	3.32	3.13	1.66	08.0	8.29	17 · 20	2,111
	No.	70	99	35	17	175	363	7
		Stomach	Lung & Bronchus	Breast	Uterus	Other Sites	TOTAL DEATHS FROM CANCER 363	TOTAL DEATHS: (All Causes)

Deaths due to Lung Cancer:

The number of deaths due to lung cancer was 98, the highest number ever recorded in any year in Bolton. Although there are fluctuations from year to year, there has been a substantial increase in the deaths from lung cancer, as the following figures show:

This is, of course, a man-made epidemic and its future progress is within our control. Continual efforts are made by the Health Department to bring to the notice of the public the relationship between cigarette smoking and lung cancer. One of the posters recently issued by the Health Department describing the course of lung cancer in a man aged 60 is shown on page 24. If these efforts are successful, we can expect in time to see the number of lung cancer deaths falling. If they are not successful, we can expect to see the number of deaths increasing still further, and it is impossible to say when the peak of the epidemic will be reached.

Excessive deaths from respiratory conditions following periods of fog:

During the winter 1961/1962 there were two bad "smog" episodes in Bolton. The first lasted from the 19th to the 22nd December, 1961, and the second occurred during the 3rd and 4th January, 1962. They were accompanied by a considerably increased mortality from respiratory conditions among old people. It would seem that atmospheric pollution was an important contributory factor in many of the deaths. The atmospheric pollution findings are given in the histograms on page 25.

The following table shows the number of deaths from respiratory infections during periods of eight consecutive weeks during different winters when respiratory deaths were at their highest. It is very interesting to note that this year the number has exceeded considerably that of 1957 when there was a

moderately severe epidemic of influenza virus "A" infection.

Period	Pneumonia	Bronchitis	Influenza	Total	Highest number in any one week
1957 September 21st - November 9th	36	32	58	126	31
1959/1960 December 19th - February 6th	50	37	_	87	18
1960/1961 December 23rd - February 11th	73	77	20	170	42
1961/1962 December 23rd - February 10th	104	87	20	211	47

Fatal Road Accidents:

I am greatly indebted to the Chief Constable for the following information.

During 1962, 2,067 accidents which occurred in the borough were reported to the Police. The number of traffic accidents involving personal injury totalled 705; the number of persons injured in these accidents was 838.

A VICTIM OF LUNG CANCER

Sir,

I have just returned from certifying the death of a man of 60 who died from lung cancer. Nine months ago he was a fit working man and a diagnosis of lung cancer was made by X-ray. Two weeks later the growth was found to be inoperable.

The growth was situated at the entrance to the left lung, and over the ensuing weeks gradually closed this airway. There was some shortness of breath and blood stained sputum, and the patient was naturally very anxious about the outcome of all these symptoms. By Christmas he had lost two stones in weight, and was beginning to look emaciated. He had to take to his bed because of increasing weakness.

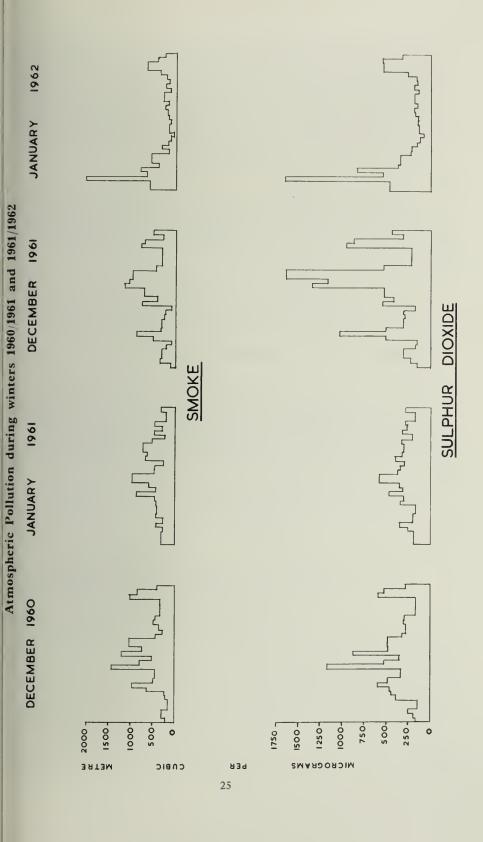
The growth by this time had paralysed the laryngeal nerve, so that his voice was hoarse. By February he had lost a further two stones because the growth had begun to close his gullet, making swallowing difficult. It had begun to invade the entrance to the other lung and he had to be propped up in bed to make breathing easier. Not even a cigarette would give him that cool satisfying feeling now, when all his waking moments were spent trying to get a deeper breath.

By this time he was on six-hourly morphium injections and could only take sips of fluid. But a man otherwise fit and healthy takes a very long time to die of starvation and slow asphyxia. However, at long last the end has come. He was one of over 23,000 men and women who die every year in this country from lung cancer, one of the major causes of which has been known for over five years.

How much longer shall we have to wait for legislation prohibiting advertisements encouraging cigarette smoking; and so help to reduce the incidence of this form of prolonged

agony and death?

Yours sincerely,
General Practitioner.



Twenty persons were killed, this being a decrease of 5 on the previous year. Twelve of these accidents occurred during the hours of darkness and 8 during daylight hours. Fatal accidents during daylight inolved 5 pedestrians aged 3 years, 7 years, 10 years, 69 years and 73 years; 1 car driver aged 30 years; 1 moped rider aged 30 years, and one cyclist aged 56 years. Accidents during the hours of darkness were responsible for the deaths of 4 pedestrians aged 38 years, 54 years, 57 years and 78 years; 2 car drivers aged 24 years and 31 years, 5 car passengers aged 22 years, 26 years, 35 years, 38 years and 52 years, and one motor cyclist aged 47 years.

Fatal Accidents in the Home:

The number of fatal accidents in the home during 1962 was 43, a decrease of thirteen compared with 1961. The accidents in 1962 followed the usual pattern. Nineteen of the deaths followed fractures of the femur, fifteen cases being 80 years old or over. Other falls in the home (apart from those caused by fractures of the femur) caused eight deaths.

Carbon monoxide poisoning caused nine deaths.

Two deaths were due to burning. One was a woman in her seventies, the other was a woman over 80 years old whose clothes caught fire.

A further five deaths were due to miscellaneous causes.

Suicide:

Twenty-two deaths were due to suicide in 1962, compared with thirty-four in 1961. The main difference lies in the age group 15-44 years. Whereas in 1961 there were five male and three female deaths in this age group, in 1962 there was only one female. Carbon monoxide poisoning continued to be the predominant method used, accounting for twelve of the twenty-two cases in 1962.

The following table shows the distribution of deaths according to age, sex and the method of suicide applied.

	Age Group					
	15	-44	45-	-64	65 an	d over
	Male	Female	Male	Female	Male	Female
Carbon monoxide poisoning	_	1	4	2	3	2
Barbiturate Poisoning	-	_	4	1	-	1
Self-inflicted violence	-	_	1	-	3	-
Totals	-	1	9	3	6	3

PART II

LOCAL HEALTH SERVICES

Care of Mothers and Young Children

Midwifery

Health Visiting

Home Nursing

Immunisation and Vaccination

Ambulance

Prevention of Illness, Care and After-Care

Home Help

Mental Health

(Development of Local Authority Health and Welfare Services) Ministry of Health Circular 2/62

CARE OF MOTHERS AND YOUNG CHILDREN

Ante-Natal Clinics:

Ante-natal clinics conducted by Health Department staff continued to be held three times a week in the Civic Centre on Monday and Wednesday mornings and Tuesday afternoons. These clinics were held for patients who had booked a municipal midwife and were to be confined at home.

Altogether, 144 clinics were held with an average attendance of 36 patients per session. Expectant mothers wishing to book a midwife for domiciliary confinement did so at these clinics. In some cases the subsequent ante-natal care was undertaken by the general practitioner, but otherwise the patients continued to attend the Civic Centre clinics by appointment throughout pregnancy.

ATTENDANCES:

	1962	1961	1960
New bookings	851	830	756
Return visits	4,291	3,642	3,335
Post-natal visits	21	44	85
TOTAL ATTENDANCES	5,163	4,516	4,176

Although these figures continue to show an increase the attendance for a post-natal examination has been rather low due mainly to more mothers engaging their own general practitioner. Although 56 mothers were invited to attend, only 21 responded.

CASES REFERRED FOR CONSULTANT OPINION:

Patients were referred to Bolton District General Hospital for the following reasons:

							O. OF
Placenta praevia						 	1
Home conditions						 	4
Multiple pregnancy						 	5
Low haemoglobin						 	1
Breech and mal-pres	sentati	ion				 	6
Toxaemia						 	3
Rh. negative with ar	ntibod	ies				 	4
Difficult obstetric hi	istory.					 	11
Multiparity						 	12
Disproportion						 	2
Positive Wasserman	n .					 	1
			Tr.	~ m . v			50
			1 (OTAL	•	 	50

BLOOD EXAMINATION:

All patients on their first visit to the clinic had blood samples taken for investigation for haemoglobin estimation, Rhesus factor and Kahn reaction. Where the patient was found to be Rhesus negative the specimen was further investigated for the presence of antibodies and the test was repeated in the 32nd week of pregnancy. A repeat haemoglobin estimation during the last eight weeks of pregnancy was also done in all cases where it was indicated.

Some of the patients attending the clinics had had blood specimens at hospital before attending the clinic.

The following are the results of the examinations:

Blood specimens for haemoglobin	1.	,373
Rhesus negative specimens		162
Rhesus positive specimens		601
Kahn reaction negative		668
Kahn reaction positive		1
Kahn reaction doubtful		5

CHEST X-RAY:

All patients attending the clinics were given an appointment to have their chest X-rayed if they had not had one during the previous twelve months. A special session is reserved for expectant mothers. Three hundred and ninety-five women attended and no active lesion was detected.

VACCINATION AGAINST POLIOMYELITIS:

Each expectant mother visiting the ante-natal clinic was offered vaccination against poliomyelitis. The use of oral vaccine was commenced at the end of February, 1962. A total of 86 women received three doses.

IRON THERAPY:

All women attending the clinics were given ferrous fumerate from their first attendance at the clinic and continued throughout pregnancy.

PHYSIOTHERAPY:

Instruction in relaxation exercises was provided during the clinic sessions by the physiotherapist who was in attendance in an adjoining room.

W'ELFARE FOODS:

Welfare foods were available during all clinic sessions from the counter in the waiting room.

MATERNITY PACKS:

Maternity packs containing all the necessary sterile equipment for the confinement were supplied free to all mothers who had arranged to be delivered at home. Seven hundred and fifty-two packs were issued during the year.

DENTAL ARRANGEMENTS:

All expectant mothers who needed dental treatment or care were given the opportunity to attend the Authority's dental clinic which was held twice a week.

LIAISON:

Co-operation with the hospitals and general practitioners continues to be excellent. Hospital records of previous confinements have been made available as usual for the information of the clinic staff and they have been of invaluable assistance in many cases. Also where a patient had attended the hospital booking clinic but not been accepted for hospital confinement, copies of the blood and X-ray reports were forwarded to the Local Authority clinic when the patient subsequently attended to book a midwife. This has saved repetition of routine tests.

As before, a full report, including details of the blood tests, was always sent to the general practitioner when a patient first attended the clinic, and subsequent reports were sent in those cases where the general practitioner had been engaged. The midwives have also been sent full reports of their patients' attendances at the clinic.

Child Welfare Centres:

The clinic service remained the least satisfactory aspect of the health visitors' work. It was difficult to teach high standards in some of the hired premises. Despite the discouraging conditions in some clinic premises, much good work was carried out. Clinic attendances remained high but there was a reduction of 631 in the total attendances.

Details of the centres and of the volume of work carried out are as follows:

		No. of	TOTAL
Centre	Day	Sessions	ATTENDANCES
Civic Centre	Monday afternoon	48	2,287
Daubhill	do.	46	1,132
Chalfont Street	do.	47	2,017
Deane	do.	48	1,928
Tonge Fold	do.	45	1,687
Astley Bridge	Tuesday afternoon	49	1,649
Halliwell	do.	49	3,359
Chorley Old Road	do.	49	3,938
Civic Centre	Wednesday afternoon	49	2,427
Rosehill	do.	49	2,027
Astley Bridge	Thursday afternoon	51	3,259
Civic Centre	do.	52	2,119
Daubhill	do.	50	3,291
Delph Hill	Friday afternoon	49	1,962
Tonge Moor	do.	49	3,416
The Withins	do.	50	3,144
Lever Edge Lane	Saturday morning (fortnightly)	25	592
	Totals	-	
		805	40,234

Approximately 87 per cent of babies born to Bolton mothers were taken to child welfare centres during their first year of life. Details of attendances at different ages are shown in the following table.

Attendances at Child Welfare Centres

Age of Child	First Attendance	Subsequent Attendances	Seen by Doctor at Child Welfare Centre
0 – 1 year	2,411	31,317	13,939
1 – 2 years	205	3,989	2,207
2 – 5 years	115	2,197	928
Totals	2,731	37,503	17,074

TOTAL ATTENDANCES:

40,234

The assistant medical officers referred some of the children attending child welfare centres to consultants, always of course, with the family doctor's consent. The details of the 112 cases referred during the year are as follows:

Referre	d to	Ophthalmic Surgeon					38
,,	>>	Dermatologist					7
,,	,,	Paediatrician					25
,,	,,	Orthopaedic Surgeo	n				7
,,	,,	General Surgeon					29
,,	,,	Plastic Surgeon					- 1
,,	,,	Ear, Nose and Throa	at Su	rgeo:	n		2
,,	,,	Professor Ewing					3
			T			-	112
			10	OTAL			112

VACCINATION AGAINST POLIOMYELITIS:

Number of injections given at Child Welfare Centres

1st	2nd	3rd
Injections	Injections	Injections
2,547	2,028	2,960

VOLUNTARY WORKERS:

During the year 63 voluntary workers attended child welfare centres to assist with routine duties including record keeping, the sale of welfare and proprietary baby foods, and baby weighing. These ladies attended regularly throughout the year. Without their help the clinics could not have run so smoothly. We are indebted to them and to the members of the Women's Voluntary Services who assisted at certain clinics.

Children "At Risk" and Handicapped:

During the past decade the infant mortality rate and morbidity rate of early childhood have shown a steady decline. These have been accompanied by a rising survival rate of immature, malformed and birth-injured babies.

The importance of planning medical and educational treatment during initial periods of development and the integration of these children into society instead of in special institutions has only recently fully been realised.

In order to understand the problem fully it was decided that children who were "at risk" should be carefully and frequently examined. Premature babies have constituted a large "at risk" group for many years and these have been followed up by the paediatricians in hospital out-patient departments. Relationships have also been found between breech presentations and congenital dislocation of hip, toxaemia of pregnancy and increased incidence of myopia, kernicterus and deafness, difficult delivery and cerebral palsy.

Large scale testing of all births provides little return for the large amount of work involved and in particular where large scale testing for deafness has been carried out the cases found would all have been in the "at risk" group. It has thus been considered far better to keep an "at risk" register and to follow up more closely these children in the pre-school period. The information for the register depends on close relationship with the hospitals, maternity homes and the domiciliary midwifery service. The accuracy of the register is dependent on correct information being received. It has now been agreed in Bolton that this information should be collected by the Health Department. A special clinic is to be held in 1963 to examine these "at risk" cases over an agreed period. The Consultant Paediatrician, one of the Assistant Medical Officers of Health and a health visitor will all be present and it is hoped that the problem of any handicapped child from this "at risk" group will be detected and helped at a very much earlier age than previously. When a child has passed the normal milestones of development and has finally been passed as having no handicap his name will be removed from the register or, if handicapped, his name will be transferred to the register for handicapped children.

In 1962 there were 451 babies on the "at risk" register. They fall into the following categories:

	Premature infants	 	 	101	cases
2.	Forceps delivery	 	 	144	>>
3.	Caesarean section	 	 	21	,,
4.	Breech delivery	 	 	51	>>
	Multiple pregnancies		 	21	,,
	Rhesus negative	 	 	40	,,
7.	Illness of the mother		 	20	22
	Illness of baby	 	 	21	33
	Miscellaneous		 	61	"

Some cases are in more than one category. These children will all be screened for deafness at about six months and it is hoped that the majority will be seen at the special clinic to be held in the department with the Consultant Paediatrician in 1963.

The handicapped register is a register of pre-school children who are physically or mentally handicapped and who may require special medical or educational help. The register includes cases of congenital and acquired conditions. The information to compile such a register is derived from the following sources:

Direct from hospital General Practitioners Health Visitors Public Health doctors

At the end of the year there were 284 children on the register. The method of keeping the register has been re-organised this year and the information is now classified under defect headings. An analysis of the 284 shows the following:

DISEASE OR DEFECT	No, of Cases
Asthma	8
Blood diseases	7 (this includes 2 Leukaemias)
Cardiac	28
Cleft palate and hare lip Speech defects	8
Partial hearing	7 (2 1) [73]
Digestive system	
	(b) cirrhosis of liver 1 (c) diabetes 1
	(d) colostomy 3 (Hirschsprung's disease)
	(Colon obstruction)
	(Perforated bowel)
	(e) fibrocystic disease of pancreas 2 (f) biliary atresia 1
	(g) tracheo-oesophageal fistula 1
	(h) allergy 1
Emilanou and controlsions	(i) imperforate anus 1
Epilepsy and convulsions Orthopaedic	60 60 11111 1 61
ormopacare	hip 28
	Talipes 15
Retarded	\[\lambda \text{Miscellaneous} 26 \\ 42 \text{ (including 5 mongols)} \]
Cretins and dwarfs	
Vision	3
Miscellaneous	40

Although there appears to have been an increase of cases on the register this year this may well be due to information about the handicapped child being received at an early age.

The value of keeping such a register can briefly be summarised under the following headings:

To enable treatment to be given as soon as possible To maintain a continuous follow-up of progress To assess any possible special education requirements To enable special help to be given to the parents, both

Γo enable special help to be given to the parents, both with management of the child and encouragement where necessary

Special education has already begun with two of the children who have partial hearing. They already attend the nursery class at the Thomasson Memorial Special School for the Deaf.

Four children who are severely mentally retarded are under the care of the Mental Health Section. The severe cardiac cases will be educated at special schools when they become five years old, and some of the more severe epileptics will attend schools for epileptics when old enough.

The majority of children on the handicapped register attend hospital. In October a special clinic was started for the children who are mentally or physically retarded but who do not require hospital treatment, to observe their progress and to help the parents with their special problems and to give advice where possible.

The health visitors visit the homes of the children on the register periodically and submit a report to the Assistant Medical Officer of Health in charge of the register. A file is kept for each child and the information from the health visitors' reports and copies of hospital reports are entered. This information is passed to the School Health Service when the child reaches five years of age so that it is available to the school doctors at the routine school medical examinations.

Consultant Paediatric Clinic:

In October, 1962, a joint consultative clinic was set up on alternate Wednesday afternoons at the Civic Centre when the Consultant Paediatrician, Dr. W. Dickson, an Assistant Medical Officer, Dr. M. J. Allanson, and a health visitor, see jointly children of the following categories:

- (1) Those cases referred to the Special Schools
- (2) Younger handicapped children, particularly cases of cerebral palsy
- (3) Mentally retarded children

The object of the clinic is to co-ordinate the medical and nursing treatment necessary in these cases and to advise the parents on the care of their children and on any special problems they may have.

So far, 32 children have been seen and it is felt that this clinic serves a very useful purpose.

Ascertainment of Deafness in Young Children - Screening Tests of Hearing:

The Department of Audiology and Education of the Deaf of Manchester University have devised a series of special tests to estimate the ability of babies and young children to hear normally and, as in previous years, these were used during 1962 in screening the hearing of young children. Health visitors, working in pairs, are trained to carry out these tests by Dr. I. G. Taylor of the Manchester Department of Audiology and Education of the Deaf. Dr. Taylor visited the Bolton Health Department in June, 1962 in order to train a further twelve health visitors, and he returned in December to decide whether these same health visitors had become proficient in the administration and interpretation of the screening test of hearing. There were already five nurses in the department qualified to screen the hearing of young children, and with the twelve newly trained staff the department now has seventeen health visitors able to undertake this work.

In 1961 the Health Department had adopted the policy of only screening the hearing of those babies considered to be "at risk", that is particularly liable to some handicap such as deafness, and this same policy was followed in 1962. For every child from the borough, whether born in Bolton District General Hospital, Haslam, Havercroft or Heaton Grange Maternity Homes, or at home, the midwife concerned completed a midwifery discharge notice which she returned to the Health Department. On these notices the midwife was asked to record the type of delivery; whether the ante-natal history included Rhesus incompatibility, haemorrhage, toxaemia, or any infection or other illness during pregnancy; the baby's birth weight; length of gestation; and whether the baby had anoxia at birth, jaundice which could not be regarded as physiological, infection or any other abnormalities. The Superintendent Nursing Officer or her deputy examined all these birth notifications and recorded details of those babies where there had been any abnormality during the pregnancy or delivery which might predispose the child to some degree of hearing loss. As these children reached the age of seven months, at which time they are usually mature enough to respond to the tests, arrangements were made for them to have their hearing tested by the specially trained health visitors.

In addition to these children, if any child was suspected of having defective hearing by any doctor or health visitor, that child was also examined. Finally, all children on the handicapped children's register who had not previously had their hearing checked were tested.

The following table shows the various reasons why children were referred for hearing tests in 1962.

CATEGORIES OF SCREEN-TESTED CHILDREN

- (a) MATERNAL CONDITIONS
 Maternal Diabetes
 Maternal Myxoedema
 Maternal mitral stenosis
 Rhesus Incapability
 Ante-partum haemorrhage
 Post-partum haemorrhage
 Caesarian Section.
- (b) Where the Baby has Shown:— Asphyxia Anoxia Slow to cry after birth Foetal distress Prolapsed cord Cord round neck Severe Jaundice Cyanotic attacks Heart murmur Tachycardia Cerebral conditions Mongolism Hypospadias Replacement transfusions Forceps delivery Premature birth and premature twins birth. Breach delivery

(c) Babies referred by Health Visitors

Handicapped children Convulsions

Backward children Fractured skull and other injuries due

to accidents

Epileptic

Deformed auditory meatus Haematuria Adopted baby Parents deaf Mother's request Coeliac disease Otitis media Nervous children

Dyslalia

(d) Babies referred by Consultant Paediatrician, Assistant Medical Officers or General Practitioners

Poor speech and query deaf Not talking Children for Adoption Meningitis

In each case, where necessary, the screening tests were applied on three separate occasions before a child was considered to have failed to respond normally. Thus any child who failed to pass the first test was examined again after a short interval, and if it still did not satisfy the health visitors that it could hear normally, a third appointment for testing was made. When a child failed three tests further action was taken, in the majority of cases the child was referred to the Department of Audiology at Manchester for more specialised examination.

RESULTS

	Under 1 year	%	1 to 2 years	%	2 to 5 years	%	Totals	%
Number tested	131	67,2	25	12.8	39	20.0	195	
Passed— 1st Test 2nd Test 3rd Test	112 11 2	85.5 8.4 1.5	22 3 0	88.0 12.0	29 5 3	74.3 12.8 7.7	163 19 5	83.6 9.7 2.6
Failed 3 Tests	6	4.6	0	-	2	5.2	8	4.1
Diagnosed:— Deaf Not Deaf Under consideration	0 2 4	1.5	0 0 0		1 0 1	2.6	1 2 5	0.5 1.0 2.5
Where tested— At home At clinic	55 76	42.0 58.0	20 5	80.0 20.0	34 5	87.2 12.8	109 86	55.9 44.1

Two hundred and fourteen children were selected for testing during the year, but nineteen of these moved out of the area before they were old enough to be tested. Thus a total of 195 children had their hearing screened during the year compared with 376 children examined in 1961. Nineteen of these children failed one test but passed at the second attempt. Five failed two tests but passed the third, and eight children failed all three tests.

These eight children were therefore considered to have failed the screening tests of hearing, and they represent 4.1% of the children tested. Six of these children were under the age of 1 year, and of these, one child whose reactions were slow was retested by the health visitors after an interval of three months and he passed this fourth test, whilst a second child, who was referred to the Department of Audiology for further testing, passed the tests at Manchester where his slow responses were considered to correspond with his pattern of general development; thus two of the under ones who failed the screening tests of hearing were not considered to be suffering from any significant hearing loss on further investigation. The other four children in this age group are still under observation, one child is to have a fourth test by the health visitors in the near future, a second child is waiting to be seen at the Department of Audiology for further testing, a third child has been examined at the Department of Audiology. but because of severe cerebral retardation they were unable to be certain of this child's ability to hear, and further testing is to be attempted when he is more mature, and the fourth child has a congenital deformity of both ears for which he has been referred to a consultant E.N.T. Surgeon. This child was tested a fourth time by the health visitors but failed this examination also. No child under the age of 1 year was diagnosed as being deaf.

Two children in the age group 2 to 5 years failed all three tests, one of these a little girl aged $3\frac{1}{2}$ years, who had been tested because of her failure to talk was referred to the Department of Audiology where she was considered to have a real and serious auditory defect. She has now been supplied with a transistor hearing aid, and attends the Thomasson Memorial Special School. The second child in this age group is waiting to be seen at the Department of Audiology.

Three children who had failed three screening tests in 1961 were also retested in 1962 by the health visitors. Two of these children had had their general quotient estimated on the Griffiths Mental Development Scale, and in both cases their mental age was very low. General mental retardation was therefore considered responsible for the fact that they failed yet a fourth test, and they are to be kept under observation. The third child who was also mentally retarded was seen at the Department of Audiology where he was reported to be able to hear.

One child under one year of age did not have three tests but was referred after two tests to the Department of Audiology by Dr. Dickson, the Consultant Paediatrician, and she was diagnosed as suffering from Waardenberg's syndrome. She is now wearing a hearing aid.

The Griffiths Mental Development Scale:

This is a series of tests devised by Dr. Ruth Griffiths, a child psychologist, which enables the progress of children from birth to two years of age to be assessed in relation to other children of the same age. The full test is divided into five sub-scales—(A) Locomotor; (B) Personal-Social; (C) Hearing and Speech; (D) Eye and Hand; and (E) Performance. This enables the child's development in different directions to be compared, and is particularly useful in dealing with a backward or handicapped child as comparison of the results on the various sub-scales will show whether or not the child is generally backward, or whether development is only slow in relation to a particular handicap. The information obtained helps both with regard to the management of the child and also with the estimation of the prognosis.

One of the medical officers has been trained and has been using the Griffiths Scale since 1960. During 1962, thirty babies were referred to her, of whom twenty-three were tested, two were still waiting to be seen at the end of the year, and five were not tested for the following reasons:—died - 1; failure to keep appointments - 2; removal from district - 1; refusal of parents to child being tested - 1.

The children were referred for testing for the following reasons:—

Apparently backward	 	 	 	14
Failed three hearing test				2
Delayed speech	 	 	 	3
Microcephaly	 	 	 	1
Cerebral haemorrhage a				1
Cerebral palsy	 	 	 	2
Anoxia at birth	 	 		1
Mongoloid facies	 	 	 . ,	1
Prior to adoption	 	 	 	5

The children were referred by the Consultant Paediatrician, Dr. W. Dickson, in four cases, the general practitioner in one case, by assistant medical officers of health in twenty-three cases, and by the Superintendent Nursing Officer in two cases.

Routine Testing of Babies for Phenylketonuria:

A simple test of urine of 1,961 babies at about six weeks of age for the detection of phenylketonuria was carried out by the health visitors. No cases were found during the year.

Care of Unmarried Mothers:

Work with unmarried mothers was again carried out by the Bolton Moral Welfare Association for the Corporation during the year. The reduction in the number of very young unmarried mothers noted last year was not maintained.

During the year the Moral Welfare Worker dealt with 98 cases. Twelve of these cases were girls aged 17 years, and fifteen were girls aged 16 years and less.

T. 1 1 6 . 1 1.1(1962	1961	1960	1959
Total number of girls aged 16 years and under who gave birth to live babies during 1962	15	3	6	2
Ages of mothers at the date of birth of their babies:—				
Age of mother at last birthday 16 years	5	2	4	1
,, ,, ,, ,, 15 years	8	1	2	1
,, ,, ,, ,, ,, 14 years	2			

An annual grant was paid to the Association by the Corporation and in addition any maintenance charges required for individual cases, where necessary, were met.

It became increasingly difficult to find places, especially for the very young expectant mothers, in Mother and Baby Homes run by other authorities.

Mother and Baby Homes where girls were accommodated for an average period of nine to ten weeks were as follows:

St. Agnes' Home, Manchester	6 cases
St. Anne's Maternity Home, Heywood	3 cases
St. Margaret's Home, Wigan	1 case
The Girls' Hostel, Lancaster	1 case
Sacred Heart Maternity Home, Kendal	1 case
The Grange Maternity Home, Wilpshire	5 cases
The Methodist Maternity Home, Manchester	5 cases
Mater Dei Home, Blundellsands	2 cases
Good Samaritan Home, Warrington	4 cases
St. Theresa's Home, Salford	4 cases

All paid part of the cost of maintenance and the local authority paid the remaining part.

Recuperative Training:

Three families were sent to Brentwood Recuperative Centre for periods of one month. This enabled the mothers and children to enjoy a recuperative holiday whilst the mother received training in all aspects of home making.

Family Planning:

No change has taken place in the administration of the facilities for family planning advice in the County Borough.

This work is carried out by the Bolton Family Planning Association and two separate weekly clinics are held, one at the Health Department in the Civic Centre on Mondays from 6.30 to 7.30 p.m. and the other at the Friends' Meeting House, Tipping Street on Fridays from 6.30 to 7.30 p.m.

The patients were all referred from medical sources. At the Civic Centre there were 1,308 patients who had previously attended, 364 new patients and 33 patients who had been attending Family Planning Clinics in other parts of the country. The number of clinics held was 43. At Tipping Street there were 435 patients who had previously attended, and 123 new patients. The number of clinics held was 44.

Distribution of Welfare Foods:

Welfare foods continued to be distributed daily from the public counter in the Health Department at the Civic Centre and also from twelve centres in various parts of the town where child welfare clinics were held. At these centres thirteen clinics were held weekly and one fortnightly.

The following table shows the total issues during the past three years:

Сомморіту	1960	1961	1962
National Dried Milk	30,654 tins	24,991 tins	20,839 tins
Cod Liver Oil	11,513 bottles	7,813 bottles	3,999 bottles
Orange Juice	71,421 bottles	47,289 bottles	32,214 bottles
Vitamin A & D Tablets	10,025 packets	7,548 packets	4,673 packets

Issues from the Health Department distributing centre, which was open during normal office hours, expressed as a percentage of the total issues, were as follows:

National Dried Milk				73 per cent
Cod Liver Oil				56 per cent
Orange Juice				59 per cent
Vitamin A & D Tablets				73 per cent

Welfare foods were issued from the central store at the Health Department to the following institutions. The figures are included in the above totals for the year.

NATIONAL HEALTH SERVICE National Dried Milk

Institutions	Cod Liver Oil Orange Juice	
DAY NURSERIES	National Dried Milk Cod Liver Oil Orange Juice	 108 bottles

Issues during the year again fell considerably in comparison with previous years but in considering these figures account should be taken of the increased charge for Orange Juice and the introduction of charges for Cod Liver Oil and Vitamin Tablets from 1st June, 1961. A comparison of issues during the last six months of 1962 against the same period in 1961 shows decreases of 8 per cent for Cod Liver Oil and 21 per cent for Vitamin Tablets although issues of Orange Juice increased by 13 per cent. Sales of National Dried Milk decreased steadily throughout the year.

Day Nurseries:

The primary function of day nurseries today is to provide a service for a variety of family problems. Priority is given to the mother who, for various reasons, has to support her child. The service also provides assistance for the child from a disturbed home who has behaviour or speech problems and benefits from the social education of the nursery. There has been an increase in the number of such children referred by the paediatrician or health visitor. Three children who were slightly mentally handicapped attended part-time.

The family is the normal support for its members and it has been said that family life flourishes best when not subject to intolerable strain.

The day nursery service must be an adequate and flexible service in order to give valuable and positive help in many types of family problems.

		Average daily attendance			
Nursery	Accommo- dation	1961	1962		
Park House	50	37 · 41	42 · 06		
Shaw Street	50	39 · 74	40 · 76		
Merehall	50	32.08	37 · 11		
Roxalina Street	50	41 · 24	44 · 44		
Totals	200	150 · 47	164 · 37		

The four day nurseries provide potential accommodation for 197 children. The number of children on the register at the 31st December was 246 of whom 113 were social cases.

During the year 523 children attended the nurseries, of whom 281 were social cases in the following categories:

Separated parents		 	 	66
Unmarried mothers		 	 	46
Desertion of mother or father	٠	 	 	21
Confinement		 	 	17
Ill-health of father or mother		 	 ٠.	41
Widows		 	 	11
Deceased mother		 	 	1
Poor housing conditions		 	 	6
Divorced parents		 	 	1
Imprisonment of father		 	 	2
Doctors' recommendations		 	 	13
Inadequate income		 	 	56
			-	
Тота	L	 	 	281

CHARGE FOR DAY NURSERY ACCOMMODATION:

The Committee agreed that in two cases involving three children, no charge should be made. In the first case the parents were mentally handicapped and in receipt of National Assistance, and in the second case the father was in hospital and the mother incapable of employment.

A charge of only 2/- per day was made in a third case. The father was in prison and the mother in receipt of National Assistance.

	No. of Cases		
Charge payable at end of year	1961	1962	
2/6d - 3/10d per day	64	60	
4/1d - 6/- ,, ,,	34	35	
6/6d ,, ,,	4	5	
7/9d ,, ,,	5	6	
9/3d ,, ,,	116	135	
Totals	223	241	

During the year 12 appeals affecting 16 children were considered by a special sub-committee. Seven appeals were successful and 5 were refused.

VACCINATION AND IMMUNISATION:

The children, except for three whose parents refused to consent, were immunised against diphtheria, whooping cough and tetanus, and vaccinated against poliomyelitis.

Staff:

The staff at the 31st December was as follows:

Day Nursery Superv	isor				 		1
Matrons					 		4
Deputy Matrons					 		3
Wardens					 		4
Nursery Nurses					 ٠.		14
Nursery Assistants					 		5
Students							
						_	
	-	Гота	L S	TAFF:	 		39

TRAINING OF NURSERY NURSES::

Forty-four students of the Bolton Training Centre were awarded the Certificate of the National Nursery Examination Board. They were recruited from the following sources:

Bolton Local Health Authority Bolton Local Education Authority Elizabeth Ashmore Residential Nursery The Church of England Children's Society Wigan Local Health Authority

After qualification some of the nursery nurses were employed locally in day nurseries, nursery schools and classes and the Elizabeth Ashmore Residential Nursery.

Two commenced general hospital training. One was employed at the Eye Hospital, Manchester, on the children's ward. Two were employed at Bolton District General Hospital on the children's ward.

The remainder returned to nurseries under the control of the Church of England Children's Society to complete their agreement with the Society.

Nurseries and Child Minders Regulation Act, 1948:

Four industrial nurseries which provided accommodation for 145 children were visited by the Day Nursery Supervisor and found to be satisfactory.

In December the management of the Fine Spinners and Doublers Limited closed the Lowndes Street Day Nursery. Ten of the children were absorbed in the Health Authority's nurseries.

CHILD MINDER:

One application was received for registration and the final decision whether or not to register had not been decided at the end of the year.

Dental Treatment:

I am indebted to Mr. A. E. Shaw, the Principal School Dental Officer, for the following information and comments.

The resignation of one full-time dental officer in the early part of the year reduced the dental staff to a full-time equivalent of five.

The demand for treatment remained comparable to previous years and full treatment was given to all cases referred from the ante-natal and post-natal clinics and to pre-school children who accepted the offer of treatment.

COTTON STREET TRAINING CENTRE:

All those attending were dentally inspected and those who accepted the offer of treatment had the necessary treatment carried out at the Robert Galloway Clinic.

Dental Arrangements

Number of officers employed at end of year on a salary basis in terms of wholetime officers to the maternity and child welfare service:

(1)	Senior Dental Office	r					0.09
(2)	Dental Officers .			·			0.09
	cers employed at end ole-time officers to th						
			-				Nil
Number of dent	al clinics in operation	at end of	year				3
Total number o	f sessions (i.e. equival	ent comp	olete ha	alf days	s) dev	vot-	
ed to matern	ity and child welfare p	patients d	luring 1	the year	r		60
	ntal technicians emp						
Authority's	own laboratories at the	e end of t	he year	• • •			Nil

Analysis of Priority Dental Care

	Expectant and Nursing Mothers	Children under five
Examined	 26	154
Needing Treatment	 26	129
Treated		126
Made dentally fit		108
Scalings and Gum Treatment	 18	1
Fillings	 58	30
Silver Nitrate Treatment	 	2
Crowns or Inlays	 –	-
Extractions	 74	122
General Anaesthetics	 7	60
Dentures provided: Complete	 6	_
Partial	 6	
Radiographs	 4	6

Physiotherapy:

During 1962 massage and remedial exercises were given to children sent from child welfare centres and school clinics. Classes were also held to teach correct breathing and posture, patients being referred by Mr. Mowat, Consultant Aural Surgeon, Dr. Dickson, Consultant Paediatrician, and also from the school clinics.

Breathing exercises were continued throughout the year at Lostock Open Air School.

Ultra-violet light treatment sessions were held four times weekly, twice for infants and twice for school children. Two sessions per week, from September to March, were held at Lostock Open Air School, each child receiving treatment as prescribed by the school medical officer.

Relaxation Classes for expectant mothers were held each morning from 9.30 a.m. to 10.45 a.m. and each Tuesday afternoon in conjunction with the Mothercraft Classes. Between April and September two extra classes per week were added—Monday and Thursday afternoons.

Exercises were given at Cotton Street Training Centre on two afternoons each week to all those partially spastic children who required physiotherapy and to anyone else needing special treatment.

On August 20th the ultra-violet light department was transferred to the Robert Galloway Clinic to allow the Mass Miniature Radiography Unit to occupy the rooms in the Civic Centre, returning on September 24th.

SUMMARY OF WORK:

		Massage and Exercises	Breathing and Postural Exercises
No. of Patients	 	 170	150
No. of Treatments	 	 654	343
No. of New Patients	 	 75	31

		Ultra-violet Light					
	PRE-SCHOOL	SCHOOL	LOSTOCK OPEN AIR				
	Children	Children	School				
No. of Patients	. 398	423					
No. of Treatments .	. 2,054	2,166	2,365				
No. of New Patients .	. 154	134					
No. of Sessions	. 43	45	46				

	Expectant	Mothers—Relaxa	TION CLASSES
	No. of	No. of	No. of
	PATIENTS	New Patients	ATTENDANCES
Domiciliary Midwifery Service	251	78	490
Maternity Homes	784	266	1,480
Own Doctors	32	14	83
Bolton District General Hospital	1 104	44	224

	COTTON STREET
No. of Patients	 12
No. of Treatments	 502

MIDWIFERY

As in most parts of the country, the number of births in Bolton has increased and more mothers have been delivered at home.

Distribution of Births:

The following table shows the distribution of births and comparison with previous years:

		1959	1960	1961	1962
Total Births		2,426	2,697	2,738	2,759
Domiciliary	.	453	544	575	617
Bolton District General Hospital	.	1,174	1,328	1,292	1,310
Maternity Homes		799	825	842	813

There were also 19 babies born to Bolton mothers in maternity establishments outside Bolton.

Domiciliary Staff:

Establishment .. 10

In January 1962 there were 8 midwives on the staff. An additional midwife was appointed in June. Recruitment to the service has improved since the introduction of the rota scheme in 1961.

Domiciliary Confinements:

Municipal midwives attended 617 confinements. Mothers were visited twice daily for three days after delivery then daily for a further week.

Visits were made by midwives as follows:

1962	1961
Ante-natal visits 5,262	5,649
Nursing visits during the puerperium 10,772	9,418
Post-natal visits 23	17
Totals: 16,057	15,084

The midwives attended at home 189 patients who were delivered in hospital and discharged between the second and eighth day. In 1961 there were 104 such patients. The visits are included in the total of nursing visits.

Judging by the following record of mothers whose doctors agreed to accept responsibility for their confinements there appears to be an increased interest among family doctors in midwifery work.

		Doctor engaged	DOCTOR NOT ENGAGED
1959	 	 325	125
1960	 	 436	107
1961	 	 522	52
1962	 	 602	36

Most of the patients delivered at home received some form of analgesia as follows:

Trichloroethylene was administered in 517 cases Nitrous Oxide was administered in 21 cases Pethidine was used for 262 cases

Testing for Congenital Dislocation of the Hip:

Midwives continued to test all new-born babies in the district for congenital dislocation of the hip. No cases were found.

Notifications:

In accordance with the rules of the Central Midwives Board the following notifications were received from midwives:

	Domiciliary Practice	Maternity Homes
Notification of Stillbirth	2	3
Notification of Death of Child	1	1
Liable to be a source of infection	3	-

Medical Aid:

Medical aid was sought by domiciliary midwives on 234 occasions from family doctors for the following conditions:

RELATING TO THE MOTHER:							No. of
Ante-natal Conditions							CASES
Ante-partum haemorrhage							11
Abnormal presentation							1
DURING LABOUR:							
Premature labour							8
Prolonged labour		• •	• •	• •	• •		19
Uterine inertia							7
Foetal distress							15
Abnormal presentation							10
Perineal tear							90
Post-partum haemorrhage							19
Retained placenta						. ,	5
Obstetric shock							1
_							
Puerperium:							
Puerperal rise of temperature	e						8
Suppression of lactation							7
A .							1
Urinary infection							1
Phlebitis							2
Abdominal pain							l l
Toxaemia							l l
Secondary post-partum haen	norrh	age			•		1
RELATING TO THE CHILD:							
Feebleness							4
Asphyxia				• •	• •	• •	6
Haemorrhage from cord							2
Haemorrhage from rectum							ī
Slight convulsion							1
Discharging eyes							8
Malformations							2
Pyrexia							1
Vomiting and loss of weight							1
Anuria							1
Thrush							1
	7	COTAL				٠.	236

In agreement with the Central Midwives Board, medical aid forms from the three maternity homes are no longer sent to the Medical Officer of Health.

Maternal Mortality:

There were two maternal deaths in Bolton during 1962.

Flying Squad:

The emergency Obstetric Team from Bolton District General Hospital was called on by domiciliary midwives on 12 occasions, one being for a case of adherent placenta and 11 for post-partum haemorrhage.

District Midwifery Training:

Nine pupil midwives completed their Part II training in Bolton and were successful in their examinations to become fully qualified midwives.

Refresher Courses recognised by the Ministry of Health:

No courses were attended by midwives.

Mrs. Fern, district training midwife, attended a special course for midwives engaged in the practical teaching of pupil midwives.

HEALTH VISITING

Staff:

At the end of the year the staff comprised:

Superintendent Nursing Officer Deputy Superintendent Health Visitor/School Nurse

- 4 Group Advisers
- 1 Health Visitor engaged solely with patients of a group practice
- 2 Health Visitors engaged solely on problem families
- 18 Health Visitor/School Nurses
 - 1 Tuberculosis Health Visitor
 - 5 School Nurses
 - 1 Part-time School Nurse
 - 2 Clinic Nurses
 - 1 Health Assistant

Total: $34\frac{1}{2}$ plus 2 administrative staff

AUTHORISED ESTABLISHMENT: 37 plus 4 Group Advisers and 2 administrative staff

Included in the above were six student health visitors who completed their training during 1962 at the Technical College, Bolton. Five were successful in passing their examination in July and joining the staff. One re-entered the examination in December, was successful and joined the staff in December.

Three district health visitors resigned from the department during the year. Two trained health visitors were appointed.

One tuberculosis health visitor resigned and was not replaced.

One health assistant resigned at the end of the year.

STAFF SHORTAGES:

The Ministry of Education and the Ministry of Health—Joint Circular 12/59, 26/59—"Health Visiting Service"—recommended that in order to be able to carry out her duties there should be an average of one health visitor to 4,300 population. This ratio has not yet been achieved, but there was some improvement in the staffing position during the year:

1961 **1962**Ratio of health visitors to population 1:7,600 **1:6,182**

As in 1961 the shortage of staff was most noticeable amongst the district health visitors, their numbers having increased by only one, from 17 to 18. It was necessary for three of the four Group Advisers to retain districts in addition to their administrative duties. The number of district health visitors thereby rose to 21.

The desirability of providing car allowances for a number of health visitors whose districts were situated on the outskirts of the town was explored in 1961. In January six car allowances were allocated. This resulted in a considerable saving of travelling time and enabled the health visitors to carry out, with less strain, the changing pattern of home visiting.

HEALTH ASSISTANTS:

The policy of employing less highly qualified staff to relieve health visitors of routine work was continued. In January two health assistants were appointed to work in schools under the supervision of health visitor/school nurses. These women were unqualified but were chosen for their suitability for the work involved.

The duties undertaken by the health assistants were mainly weighing and measuring school children prior to routine medical inspections, and hygiene inspections. As a result of the success of these appointments, consideration was given to the employment of a third health assistant early in the new year.

The bursary scheme revised in 1961 to offer more financially favourable terms to student health visitors resulted in six students being recruited for training, the highest number for many years.

GROUP ADVISERS:

The Joint Circular recommended the creation of an entirely new post of Group Adviser, intermediate between the general duties staff and the administrative staff, with partly administrative but mainly field work duties. It was envisaged that the Group Adviser would provide the general grade of health visitor with professional support close at hand, carry little or no routine case-load and would be dealing with relatively few cases.

In January this recommendation was implemented. The establishment was amended by the deletion of the post of Centre Superintendent, a reduction by three in the number of health visitors and the addition of four posts designated Group Adviser.

The desirability of allocating a group adviser to a group of health visitors based on an area of the town was explored, but the unsatisfactory state of clinic premises prevented this. As a result the work of group advisers was arranged to meet the needs of the department:

One group adviser, formerly the centre superintendent, had special duties in connection with initiation of new members of the staff, and care and maintenance of equipment and stock. She also gave advice and help to a group of 5 health visitors.

- One group adviser had special duties in connection with health education and the organisation of practical work for students and visitors to the department. She also gave advice and help to a group of 8 health visitors.
- One group adviser had special duties in connection with all matters relating to screening tests for deafness of pre-school children, in addition to giving advice and help to a group of 8 health visitors.
- One group adviser was responsible for co-ordinating the work of school nurses and health assistants within the school health service, and giving advice and support to these members of the staff.

The establishment of this new grade proved to be very successful. The group advisers held regular discussions with their groups and were instrumental in disseminating new ideas and encouraging initiative among the staff.

STAFF TRAINING:

The policy of the department to arrange for the health visitors to attend residential refresher courses at intervals of five years was not implemented because of the difficulty of obtaining places at courses organised by the Royal College of Nursing and the Health Visitors' Association. Arrangements have been made to book four places for the next year. The Superintendent Nursing Officer attended a Conference organised by the National Association for Maternal and Child Welfare at Southport in June. A school nurse attended a two week course in Audiometry at the Department of Audiology and Education of the Deaf at the University of Manchester. Twelve health visitors were trained in the technique of screening tests for deafness.

STUDY DAYS:

Lectures for the staff were organised on the lines now established. The programme consisted of lectures by:

Dr. T. E. Graham, Senior Medical Officer to the Production Group of the United Kingdom Atomic Energy Authority.

Subjects - Radiation and its Effects Public Health Aspects of Radiation

Health visitors from adjacent areas were invited to attend. On the second day the staff visited Brentwood Recuperative Centre, Marple. We are indebted to the Warden for her courtesy in discussing the work and aims of the Centre.

Six health visitors attended a one-week non-residential course in Health Education organised jointly by the Manchester Health Department and the Central Council for Health Education. The subject studied was "Aspects of Health Education".

One of the health visitors engaged solely on work with problem families attended a Study Week-end at Leicester, organised by the Family Service Units.

A member of the Women's Voluntary Service for Civil Defence gave two talks to the health visiting staff in the "One-in-Five" talks series.

A film on the Mouth-to-Mouth Method of Resuscitation was shown to the staff in September.

Training of Student Nurses and Other Visitors:

The Medical Officer of Health and the Deputy Medical Officer of Health gave lectures to the student nurses at the Bolton School of Nursing in accordance with the requirements of the General Nursing Council's syllabus.

An increasing amount of the health visitors' time was spent in training students in the practical aspects of the work of the Public Health Department.

All student health visitors attending the course at the Technical College in Bolton received their introduction to public health by a visit to the Health Department at the beginning of the course. Four of these students subsequently were attached to the department for their practical training by health visitors with a special aptitude for this kind of work.

Practical training and demonstration was given to ten student health visitors from the Manchester Technical College course, who spent a day accompanying health visitors on their visits.

A very worthwhile aspect of practical training arises in the case of student hospital nurses. In accordance with the requirements of the General Nursing Council's syllabus, they are given an opportunity to see the home background of a varied cross-section of the public, the aim being to give them an insight into many problems which may face their patients both before admission to hospital and on discharge. Towards the end of their first year of training 46 student nurses from the Bolton School of Nursing spent a day observing the ante-natal and child welfare clinics. At the end of their second year of training, 28 student nurses spent a day accompanying the health visitors on a wide variety of visits. This was followed by a meeting of the student nurses and the public health officers, when points of interest raised during the visits were discussed.

Other visitors to the department who wished to observe the work of the health visitors included an Administrative Officer from India, a trainee in Hospital Administration and several student teachers.

We were particularly pleased to provide practical experience for four Social Study students who were taking a two-year course in General Social Work at Manchester College of Commerce, one of the first courses to be organised as a result of the Younghusband Report on Social Workers.

Home Visits:

The pattern of home visiting of babies and young children continued during the year. New babies were visited at about twelve days of age. Mothers were given a card stating the name of the health visitor and giving details of where she could be contacted if need arose. An invitation to attend the nearest child welfare clinic was also given at the first visit. Whenever possible, the health visitor re-visited when the baby reached the age of six weeks in order to carry out the simple urine test to detect phenylketonuria. If conditions were satisfactory at this visit the health visitor might not visit again until the baby reached one year. Between the ages of one and five the child may perhaps be visited on only two or three occasions, as need arises.

As a result the total number of visits to babies and young children continued to decrease. The emphasis of visiting was concentrated on visits to new babies and to families with problems. These families required much support and encouragement in order to attain and maintain a reasonable standard of living.

Analysis of Home Visits

First visits to expecant mothers	185
Subsequent visits to expectant mothers	209
First visits paid to newly-born babies	2,871
Subsequent visits to children under 1 year	7,624
Visits to children 1 - 2 years	5,048
Visits to children 2 - 5 years	9,326
Infant death enquiries	15
Infectious disease visits	235
After-care visits	290
Chronic sick visits	2,371
Visits in connection with Priority re-housing on medico-	
social grounds	279
Visits in connection with the B.C.G. Survey - Medical	
Research Council	1
Ineffective visits to households	3,084
Miscellaneous visits	1,111
Total	32,649
20112	

The care of mothers and young children has always been the first duty of the health visitor, but gradually this is being superseded to a large extent by care of the elderly and chronic sick. More and more of the health visitors' time was taken up with these visits. This type of visit cannot be hurried and is very time consuming.

Tuberculosis Visiting:

One full-time health visitor resigned early in the year and was replaced by a part-time clinic nurse who worked mainly in attendance at Chest Clinic sessions, the remaining full-time health visitor concentrating on after-care visits.

As a result the number of visits to patients decreased from 1,941 in 1961 to 807 in 1962.

Number of visits to patients	 	 	 	807
Number of ineffective visits	 	 	 	249

The high proportion of ineffective visits arose because patients treated by chemotherapy were enabled to return to work after a comparatively short period of treatment. Steps are being taken to try to reduce such visits.

Geriatrics:

The care of the elderly and aged remained a problem. The time of the health visitors was taken up more and more in visiting these people to ascertain their needs and call upon the services best suited to their requirements. This may have been urgent admission to hospital, or the services of a district nurse or home help.

Admission to hospital was arranged through the Bed Bureau based at Bolton District General Hospital, on receipt of an application from the general practitioner.

Patients were admitted to hospital according to priority. The first consideration was the patient's medical condition, as supplied by the family doctor. The social conditions were then assessed by the health visitor, to enquire if any member of the family could look after the patient, with the support of any of the local authority services, e.g. district nurse, home help or laundry service. On the basis of these two reports and his domiciliary visit, accompanied by the liaison health visitor, the Geriatric Consultant would assess the urgency of admission to the Geriatric Unit.

In some instances night sitters were provided to relieve relatives, and in the case of persons living alone, in the terminal stages of the illness, when admission to hospital was not desirable.

One health visitor was responsible for liaison with the Geriatric Consultant as in previous years. This system continued to work well and the close cooperation between the Health Department and the Geriatric Unit ensured that the patients received the best care according to their needs.

Several patients were encouraged to attend at the Geriatric Day Hospital, where their general condition was assessed. Physiotherapy treatment and occupational therapy was given as required. Every effort was made to rehabilitate the patients in order to encourage them to remain ambulant and thus keep their independence.

No. of geriatric cases visited by health visitors	1,554
No. of visits to geriatric cases	2,371
No. of social investigations carried out on behalf of the Geriatric Unit	206
No. of domiciliary visits paid by the Geriatric Consultant accompanied by health visitor	173

Paediatrics:

Liaison between the Paediatric Physician and the health visitors has been maintained and strengthened. Health visitors continue to attend the paediatric out-patient clinics and the ward round for the mutual exchange of information between the clinicians and the social workers.

After discharge a copy of the consultant's letter to the general practitioner concerning diagnoses and treatment of the child in hospital continues to be sent to the Medical Officer of Health. These letters are helpful in selecting the names of children who may be at risk.

Health Education:

No progress has been made in group teaching at child welfare clinics because of the lack of facilities at these premises. Individual discussion and advice to mothers about their problems remained one of the most important functions of the clinic sessions. Posters were displayed wherever possible.

MOTHERCRAFT CLASS:

The mothercraft class continued to be a weekly feature of the health department. The class was held each Tuesday afternoon. Attendances increased weekly during 1962. It was proposed therefore to commence in January, 1963 a second session, to be held on Thursday afternoons weekly.

Each week a short talk or demonstration was given by a health visitor on subjects in preparation for motherhood. During the past year an increasing number of films and filmstrips were shown to illustrate the talks, including an excellent sound film on the birth of the baby at home.

The purpose of the classes was to prepare the mother-to-be to have a happy and natural approach to motherhood, by presenting to her the facts about:

- (1) Ante-natal care
- (2) Labour and birth of the baby
- (3) Preparation for and care of baby

Most mothers had their own individual problems which they were encouraged to discuss over a cup of tea after each talk.

Apart from the educational value, the class created many friendships between the expectant mothers. This was appreciated by many who had settled in Bolton since marriage and had not had the opportunity to make friends elsewhere.

The health visitors found that mothers who had attended mothercraft classes handled with much more confidence minor upsets which often occur in the first few weeks of life. Mothers were found to be able to cope with them without becoming worried and upset.

A relaxation class for expectant mothers was held on Tuesday afternoons, prior to the mothercraft class. The physiotherapist was then able to advise mothers on the value of relaxation exercises and to book appointments for those wishing to attend during the week.

Individuals attending mother	craft	class	ses d	uring	196	2	281
No. of actual attendances							1,023
Average weekly attendance							22
No. of sessions							46

Liaison with General Practitioners:

Progress has been made in implementing the recommendations of the Joint Circular of the Ministry of Health and Ministry of Education (26/59 - 12/59 dated 9.10.59) which considered that health visitors could, with advantage work in association with general practitioners, particularly in regard to observation of mothers and babies, routine visiting of the chronic sick and the elderly, and in giving general supervision to families with medico-social problems.

A Symposium organised jointly by The Royal College of Nursing, The College of General Practitioners and The Society of Medical Officers of Health in 1961 stimulated much interest in the co-operation between health visitors and general practitioners. The Medical Officer of Health circulated a report of this Symposium to local general practitioners which was discussed at the Local Medical Committee. As a result, in June, one health visitor was attached to a group practice of three general practitioners. This resulted in the establishment of a well-baby clinic held at the surgery on one afternoon each week. In addition, the health visitor attended at the surgery for consultation with patients and doctors. A car was found to be essential to enable her to cover the extensive practice.

In addition, the doctors in eight practices requested the weekly attendance at their surgeries of a health visitor. Health visitors were already visiting weekly at two group practices. The position at the end of the year was that health visitors were now visiting regularly each week a total of twenty-five doctors.

The close liaison between general practitioners and health visitors has been of mutual benefit to all, especially to the patients of the practices.

The Prevention of Break-up of Families:

During the year the health visitors supervised a total of 411 families with socio-medical problems, giving them support and encouragement to attain a more normal way of life.

Two health visitors worked solely with problem families during the year. They each supervised about 30 families, accepting cases from the health visitors which required intensive visiting, and returning them for normal visiting when the period of crisis was past. An account of the second year's work of one of the specialist health visitors follows:

"SIGNS OF FAMILY BREAK-UP

The characteristics of the 'problem family' and the indications of possible family break-up, such as general disorderliness, debts, neglect of children, unemployment and other forms of anti-social behaviour, always remain the same, although the order of their significance varies.

This seems to be due, in particular, to the district in which the families live and in general to the fact that they are unable to keep pace with the changing, complex social structure.

At the present time, because of the increased amount of involuntary unemployment there is greater difficulty in helping to place in work the fathers concerned. As well as the general hardship of unemployment there is now the danger that this might prove the decisive factor in causing "border line" cases or potential "problem families" to lapse. This is indeed happening in two of the families I visit.

The difficulties entailed in trying to place in employment a man with a prison sentence seem insuperable. For example, I have contacted several employers on behalf of a man who has had one long-term prison sentence. The results were ineffectual although assurance was given that his offence was not connected with dishonesty.

POLICY

The ordinary day-to-day support given to these families is attempted in two main ways, a good personal relationship being the basis on which all the work is built.

First of all they are encouraged to talk about their problems and particularly of their feelings towards them. The more they are able to do this the greater the likelihood they have of seeing their own part in their difficulties. This is their first step in helping themselves. Their problems usually lie partly in themselves and partly in their environment and the most time-consuming part of the work is the assessment of this. Only then can material help be given and this is the second way of supporting them. This is best done by helping them to make constructive use of any of the social services which best fulfil their particular needs.

It is futile to tell these people what to do, as also it is for services to concentrate on meeting immediate problems and paying insufficient attention to the long-term needs of the individual people who make up the family. (An apt simile might be—the giving of aspirin to a patient to reduce temperature, instead of diagnosing and treating the cause).

CO-OPERATION WITH OTHER DEPARTMENTS AND SERVICES

Work with "problem families" could not be done efficiently without co-operation from other departments and services. In Bolton we are lucky to have the full support and interest of all concerned.

Recently the Housing Department have started to inform us through the Co-ordinating Committee, when evictions are pending, in the hope that we may be able to avert the crisis. Possibly in the future there will be earlier anticipation so that we will be notified in time to attempt to prevent the situation from getting to this stage.

We are encouraged to make use of the services of the Home Help Section, Day Nurseries, Welfare Department and do so with worthwhile results.

The National Assistance Board, the Guild of Help and the W.V.S. are very helpful in providing grants and other material help.

We are fortunate to work in close co-operation with the Children's Department, Education Department and Moral Welfare Association. Their advice and help is invaluable."

The Care of Problem Families by the N.S.P.C.C. Visitor:

Complementary to the work of the special health visitors on problem families, there is in Bolton a woman visitor on the staff of the local branch of the National Society for the Prevention of Cruelty to Children who works in close co-operation with the department and with the Co-ordinating Committee for the Care of Children.

During the year the visitor has had 33 cases under her supervision. Twenty-three of these were carried forward from the previous year and 9 were new cases involving 21 children. One old case was re-opened. Seven cases were closed as "satisfactory" during the year and 4 children were taken into care by the Local Authority. Twenty-one cases were still under supervision at the end of the year. All told, 629 visits of supervision and 490 miscellaneous visits to public officials, voluntary organisations, etc., were made.

HOME NURSING

The Home Nursing Service has maintained adequate staff throughout the year with few changes.

Staff:

The staff at the 31st December was as follows:

Superintendent Deputy Superintendent

FULL-TIME

- 16 Queen's Nurses
- 2 State Registered Nurses
- 4 State Enrolled Nurses

PART-TIME

- 6 Queen's Nurses
- 2 State Registered Nurses

TOTAL

NURSING STAFF: 30 Equivalent in full-time staff to 27 (excluding administrative staff).

Authorised establishment: 29 + 2 administrative staff.

The existing arrangements for receiving messages at the Health Department between 8.30 a.m. and 6.30 p.m. have remained unchanged. The Ambulance Station continues this service after 6.30 p.m. Urgent messages are passed to the nurse on late evening rota duty. Other messages are received by the Superintendent of Home Nursing on the following morning.

Statistics of Cases and Visits:

The following table shows the number of cases nursed and visits paid each month during 1962 with figures of previous years for comparison. The number of patients being nursed each month is fairly constant. This is an average of 950 with about 170 new patients each month making a total of 1,120 patients "on the books" at any one time.

	bei b	No. of patients being nursed at beginning of month in each year				New	Cases		Nursing Visits			
	1959	1960	1961	1962	1959	1960	1961	1962	1959	1960	1961	1962
January February March April May June July August September October November December	942 969 971 971 999 992 979 984 967 973 982 976	975 977 978 984 944 921 930 931 913 924 949	948 986 966 927 938 921 914 907 925 928 923 954		300 328 263 237 211 188 190 200 175 209 188 182	225 235 218 192 184 181 166 180 167 167 210 209	300 237 180 183 188 172 164 181 161 160 165 220	267 145 172 169 171 163 158 173 145 151 141	10,320 9,905 10,428 9,966 9,535 9,697 9,334 9,730 9,122 9,623 9,626 9,976	10,242 10,256 10,966 10,116 10,050 8,797 8,420 9,535 8,833 9,292 9,684 9,728	10,193 9,405 9,421 9,022 9,794 8,721 8,448 9,127 8,467 9,346 9,102 10,175	10,671 8,503 8,838 8,915 9,676 8,933 8,208 8,913 7,969 8,910 7,647 9,133
Totals:					2,671	2,334	2,311	2,048	117,262	115,919	111,221	106,316
Nev Pati	w pat ients Dece	rem	To ainin	otal otal ong oi	NURS	books	e yea		. 2, . 3, =	62 994 048 — 042 —	1961 948 2,311 3,259	
						C	ASES	1962	Visits	Са	196	1 Visits
5 - 6	ldrei 64 ye years	ars		٠.			50 1,098 1,894	3	577 36,971 58,768	1,2	70 215 974	490 38,718 72,013
			Т	OTAL:	S	-:	3,042 ——	1(-	06,316	3,2	259	111,221
Summary	OF 1	Nur	SING	Tri	EATME	ENTS:						
	neral ectio		rsing		• •	• •			1962 73,952 10,356	71,1 46,0		
			Т	OTAL:	s			11	14,308	118,	397	

These figures show that with fewer cases among children and the middle age group the main work of the district nurse lies with older people suffering

from medical diseases. The number of intramuscular injections has again been reduced as the trend is to give fewer antibiotics by injection for mild disorders. Altered methods in surgery and early ambulation after hospital treatment have reduced the nursing care needed by discharged patients except for the long-term chronic diseases, and the elderly suffering from debility or senility.

Laundry Service:

The laundry service has become almost indispensable to the district nurse and to relatives of incontinent patients who are doing their best to care for their people at home. In 1962, 167 patients were assisted. The average number receiving this service during the summer was 53, and during the winter 59.

Nursing Equipment:

Nursing equipment is loaned to patients at the request of family doctors or district nurses. No charge is made. A detailed list of the equipment loaned to patients is given on page 78.

Treatment Sessions in the Health Department:

A total of 82 patients attended the Home Nursing Section in the Civic Centre for injections.

Attending daily	11
Attending three times a week	20
Others, varying from weekly visits to monthly visits	51

Forty-five of the 82 patients were receiving treatment for tuberculosis. Others received injections for anaemia, hay fever, muscular weakness and debility. The clinic is open from 3 p.m. to 6.30 p.m. Monday to Saturday, weekly.

District Nurse Training:

Four students completed the four months' course of training arranged by the Queen's Institute of District Nursing. All were successful in passing the examination.

Training of Hospital Student Nurses:

As part of their training, 17 students from the Bolton School of Nursing and 17 from Townleys Branch, Bolton District General Hospital, attended the Home Nursing Section of the Department and accompanied district nurses on their rounds to the patients' homes. These visits enable hospital student nurses to see the nursing care given to patients in their own homes.

Refresher Courses:

Two senior district nurses attended courses at Liverpool. The subject was student training. One state enrolled nurse attended a ten day course at Liverpool.

Transport:

There has been no change in transport arrangements. Twelve essential user allowances are granted to district nurses. Two part-time nurses receive casual user allowances. Four Corporation cars are also available and fully used by other district nurses.

IMMUNISATION AND VACCINATION

Immunisation:

During January and February the schedule of immunisation followed in the department broadly conformed to the schedule B recommended by the symposium on "Immunisation in Childhood" held in London in May, 1959, and the schedule P recommended by Ministry of Health circular number 26/61 dated September, 1961.

As the Medical Research Council's clinical trials of oral poliomyelitis vaccine showed it to be effective and safe, on February 28th this vaccine was introduced into the Bolton schedule virtually replacing poliomyelitis injections and considerably reducing the number of injections a young child needs. Mothers have been very appreciative of this new method of vaccination.

Ministry of Health circular number 17/62 dated 18th July, 1962 asked that a comprehensive plan be prepared for immunisation. The arrangements in Bolton and the schedule used were reviewed at this time and considered to be satisfactory. No alteration was made.

The table below indicates the routine timing of all the immunisations and vaccinations.

SMALLPOX VACCINATION...

. . Three months of age. In December, on a Ministry of Health recommendation, this was deferred until sixteen months of age.

rationale of this is mentioned later under the relevant heading.

PRIMARY IMMUNISATION (Diphtheria, Whooping Cough and Tetanus)

.. Three injections at monthly intervals, starting at four months of age.

POLIOMYELITIS VACCINATION . . Initially two injections at monthly intervals, but then 3 oral doses at four eight week intervals starting at seven months of age.

BOOSTER INJECTIONS

- (a) Initially one injection for diphtheria, whooping cough and tetanus given simultaneously with one for poliomyelitis, but given into separate arms during the second year of life. Later, one oral dose of poliomyelitis vaccine was substituted for the injection but this was given at least three weeks before or after the booster injection for diphtheria, whooping cough tetanus.
- (b) One injection for diphtheria and tetanus, and initially one for poliomyelitis, but an oral dose was substituted after February and these were given in school when five years of age.

During 1962 triple antigen incorporating antigens against diphtheria, whooping cough and tetanus has been used in the child welfare centres and by general practitioners. However, single antigens and combinations of two antigens were always available to meet the requirements of special cases. In September, following the Report to the Medical Research Council by its Committee on Diphtheria Toxoid ("British Medical Journal"., 2, 149), it was decided to substitute diphtheria-tetanus vaccine containing a mineral carrier for the plain formol toxoid which was being used. The booster of triple antigen during the second year of life is given primarily to produce adequate immunity to tetanus.

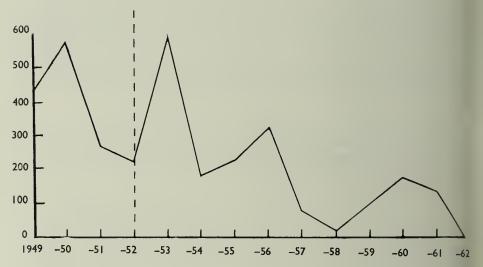
After six years of using triple antigen there is now a substantial number of children in Bolton who have been immunised against tetanus. These children do not need to be given anti-tetanic serum if they sustain a laceration, but it is essential that hospital staff and general practitioners know the tetanus immunisation state of casualties. This state can be found by telephoning the Health Department during office hours, or by referral to the personal record card, provided one has been accurately completed and is available at the time of an accident. Both these sources of information were considered too unreliable. In September the Casualty Department at Bolton Royal Infirmary was supplied with cards recording all children immunised against tetanus and in future cards will be sent monthly. The cards are indexed at the hospital.

During the year personal immunisation and vaccination record cards have been issued for each baby by the health visitor at the primary visit. These cards can serve a useful purpose provided they are accurately completed since the aim is to provide a written permanent record for each child which the mother can keep.

Every effort is made to persuade parents to have their children fully immunised and vaccinated. The health visitor discusses the schedule at her primary visit when the personal record card is presented to the mother. Suitable posters are displayed at ante-natal clinics, child welfare centres, in the Health Department and on public hoardings. A letter is sent from the Medical Officer of Health notifying parents when the second year booster for diphtheria, whooping cough and tetanus is due. The parents of school children receive another letter about the importance of the five year old booster doses for diphtheria and tetanus, and poliomyelitis. Primary immunisation and vaccination courses are also arranged for school children should the parents request these.

Incidence of Whooping Cough in Bolton, 1949 to 1962

Immunisation against, Whooping Cough started



Number of cases of whooping cough notified - 2.

Both were 5 years and under.

Both had been immunised.

The fact that only two cases of whooping cough were notified in Bolton in 1962 is most satisfactory and, in a northern industrial town, must be considered as a tremendous achievement in the field of preventive medicine.

Age at Immunisation

	TOTALS	1,422 262 1,129 265 42 42	3,168	402 1,028 249 44 111 122 2	1,761	4,929
ions	Diphtheria/ Tetanus and Tetanus only	11-000	17	367 810 167 29 6 6	1,389	1,406
Re-inforcing Injections	Triple	235 235 22 26	1,259	~~~~~	29	1,288
Re-info	Diphtheria only and Whooping Cough and Diphtheria Combined	1111-	-	w(1 -	9	7
	Whooping Cough only	11111	1	111111111	ı	ı
	Tetanus	11111	1	14-41-4444	14	14
	Triple	1,421 261 151 21 14 10	1,878	&-44-1-111	12	1,890
	Combined Whooping Cough and Diphtheria	1 11 1	2	111111111	1	2
	Diphtheria and Tetanus	1 666	1	2004 777 778 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	307	318
	Diphtheria only	11111		ω-::(4	4
		2-8 months 9-11 months 1-2 years 2-3 years 3-4 years 4-5 years	TOTAL 0-5 years	5-6 years 6-7 years 7-8 years 8-9 years 9-10 years 10-11 years 12-13 years 13-14 years 14-15 years	TOTAL 5-15 years	GRAND TOTAL

Source of Immunisation

suoi	IOIIS	Diphtheria/ Tetanus and Tetanus	43	1,357	7.2	1,427	
Re-inforcing Injections	reing inject	Triple Antigen	1,183	7	86	1,288	
Reinfo	Ne-IIII	Diphtheria only and Whooping Cough and Diphtheria Combined	I	7	_	∞	
		Whooping Cough only	l	1	,	l	
		Tetanus	9	4	11	21	4,961
		Triple Antigen	1,610	_	280	1,891	
		Combined Whooping Cough and Diphtheria	l	۲		2	
		Diphtheria and Tetanus	103	213	m	319	
		Diphtheria Immunisation only	3	1		5	
			No. of Children Immunised at Child Welfare Centres	No. of Children Immunised in Schools	No. of Children Immunised by General Practitioners and for whom a record card was received by the Health Department	Totals	GRAND TOTAL .

Diphtheria Immunisation in relation to Child Population

Age Group	Percentage of mid-year Population completely immunised
Under 1 year	63 · 5
Aged 1-4 years	69.5
Aged 5-14 years	82.3
Total under 15 years	77 · 3

Diphtheria Immunisation

The following table shows the number of children immunised during the past fourteen years :-

TOTALS			0-5 years	8,459			Ç.,	3-10 years	9,023			Ç	10-15 years	9,585		Over 15 years 2,334	29,401
1962	1684	152	25	17	13	17	206	62	=	4	4	2	1	1	1	3	2217
1961	1486	177	62	48	30	4	211	61	2	3	ĸ	4	9	2	1	6	2152
1960	1559	169	54	28	30	43	197	62	∞	9	-	1	1	1	-	6	2168
1959	1439	199	49	25	18	76	156	9	7	I	3	-	-	1	1	9	2002
1958	1375	177	28	20	23	288	24	3	ı	7	2	1	I	-	ı	2	1945
1957	1278	196	35	24	32	326	65	2	_	ı	1	_	ı	ı	ı	2	1962
1956	1205	187	48	32	37	359	57	4	2	3	-	1	ı	ı	1	ı	1935
1955	1323	414	110	58	69	673	88	12	2	4	3	2	į	2	1	1	2761
1954	1005	554	0/	42	49	490	35	6	3	1	ı	ı	ı	I	ı	1	2258
1953	671	288	62	43	8	260	249	151	162	26	10	17	10	15	5	2	2378
1952	651	638	100	63	99	164	163	64	32	2	-	ı	-	1	ı	-	1937
1951	869	029	9/	09	46	58	35	21	S	-	2	1	1	1	1	9	1678
1950	835	909	94	72	53	93	83	63	54	43	7	6	2	1	-	2	2017
1949	799	657	124	48	28	114	94	37	26	23	6	1	ı	-	1	1	1991
Age at date of inoculation	Under 1 year	1-2 years	2-3 ,,	3-4 ,,	4-5 ,,	5-6 ,,	6-7 ,,	7-8 ,,	6-8	9-10 "	10-11 "	11-12 "	12–13 "	13-14 "	14-15 "	15 years and over	TOTALS

Vaccination against Poliomyelitis:

An outstanding change during the year was the introduction in February of oral poliomyelitis vaccine. This has proved to be a popular move with the general public but despite intensive publicity the response for vaccination in persons aged twenty-five to forty years has remained poor though there has been some improvement compared with previous years.

The open sessions which began in November 1958 and at which persons could attend for vaccination without prior registration have continued throughout the year. Sessions were held each Saturday morning and Wednesday evening. Health visitors have administered the oral vaccine since this was introduced, three drops of the vaccine being given on a lump of sugar to adults, and in a small amount of syrup to babies and young children.

Primary and booster doses have continued to be given at child welfare centres since the location of a clinic often makes it easier for a mother with a large family to attend there rather than at the Civic Centre.

The fourth poliomyelitis dose for children aged five to twelve was again mostly given in the schools provided that a year had elapsed from the third injection.

The following table shows the progress of the poliomyelitis vaccination campaign during 1962:

	Mon	Month in which second or third injection/dose given											
	Jan/Feb	Mar/Apl	May/June	July/Aug	Sep/Oct	Nov/Dec	Total						
Persons given primary (first and second) injections	304	571	1,255	764	506	361	3,761						
Persons given "booster" 3rd injections 4th	938 1	2,467 411	3,115 42	1,766 36	1,066 20	613	9,965 519						

The table shows the number of people vaccinated in various groups since the scheme began in 1956:

	Numbers v	who have i	received two injections si	ne began	Numbers who have also		
By 31st December	Born in 1943/ 1962	Born in 1933/	Expectant Mothers	Others	Total	received "booster" injection	
	1962 1942	1742	_			3rd	4th
1957 1958 1959 1960 1961 1962	4,324 22,340 27,170 29,276 35,064 37,710	- 4,504 11,660 12,102 13,960 14,361	982 1,958 2,295 2,450 2,564	568 615 3,682 7,875 8,475	4,324 28,394 41,403 47,355 59,349 63,110	4,076 28,451 40,990 45,124 55,089	- - - 8,880 9,399

The percentages in certain age groups receiving two injections during 1962 were as follows:

Age Group Vaccinated
0 - 20 . . . 74 per cent
21 - 30 . . . 67 per cent
31 - 39 . . . 28 per cent (approx.)

Vaccination against Smallpox:

As was shown early in the year, there is still a need for babies to be vaccinated against smallpox. The rapidity of air travel may at any time introduce into this country a person who is incubating smallpox but on the journey feels perfectly well. Revaccination in adult life is also much less likely to produce unpleasant complications than vaccination for the first time at that age.

The Ministry of Health's Standing Medical Advisory Committee recently reviewed the present policy regarding routine vaccination against smallpox and advised certain changes which the Minister of Health accepted. This Committee advised that routine vaccination should continue in early childhood and suggested an optimum age at which it should be performed. The main problem is that of complications following vaccination. Figures for the United Kingdom for recent years suggest that any hazard associated with smallpox vaccination is somewhat less above the age of one year than below it. The Committee advised that smallpox vaccination should be offered to children during the first two years of life but preferably during the second year.

In Bolton the change was made during December when babies were no longer vaccinated for smallpox at three months of age but at sixteen months of age. The personal record card was altered accordingly. It is likely that the change in the age of vaccination will result in considerably fewer children being done.

NUMBER OF PRIMARY VACCINATIONS UNDER 5 YEARS OF AGE:

1952	 	 639
1953	 	 1,255 (local cases of smallpox)
1954	 	 1,076
1955	 	 1,098
1956	 	 1,073
1957		 1,248
1958	 	 1,304
1959	 	 1,358
1960	 	 1,375
1961	 	 1,462
1962	 	 2,042

The bulk of this work was carried out by medical officers at the child welfare centres.

The figure for 1962 includes the following children who were primarily vaccinated by family doctors:

Under 1 year 1 – 5 years		 261 136
Тота	AL	 397

Summary of Vaccinations

		Age at date of Vaccination									
	Under 3 months	3 to 5 months	6 to 11 months	l year	2 to 4 years	5 to 14 years	15 years and over	Total			
No. Vaccinated: 1961 1962	269 230	1,009 1,140	111 240	43 195	30 237	31 745	164 2,281	1,657 5,068			
No. Re-vaccinated: 1961 1962	-	_	- -	3 7	7 50	22 442	371 3,375	403 3,874			

The above figures for 1962 include 572 hospital staff.

General practitioners carried out slightly over half of the work for persons aged fifteen years and over.

Record cards which had not been previously recorded were received from general practitioners during 1962 relating to persons vaccinated in 1961 as follows:

PRIMARY VACCINATIONS	Under 1 year	 	24
	1 to 4 years	 	7
	5 to 14 years	 	4
	15 years and over	 	19
Re-vaccinations	1 to 4 years	 	nil
	5 to 14 years	 	nil
	15 years and over	 	11

(These figures are included in above totals)

Percentage of Children vaccinated in relation to births during the year:

1952—23%		ldren u	nde	r 1	year	vaccinated
1953—34%		,,	,,	22	,,	,,
1954—42%		,,	,,	,,	,,	>>
1955—46%		,,	"	,,	,,	,,
1956—41%		,,	,,	,,	22	,,
1957—49%		,,	"	,,	"	,,
1958—50%		,,	"	"	"	"
1959—52.5°		,,	"	"	,,	,,
1960—54.29	0	,,	"	,,	,,	22
1961—51.99		,,	"	"	"	,,
1962—58.3°	0	"	,,	"	"	,,

The very big increase in the number of primary vaccinations and revaccinations performed during the year was the result of widespread, though comparatively minor outbreak of smallpox in this country. Many of those vaccinated were going abroad and required International Certificates of Vaccination. During the summer months extra sessions to perform smallpox vaccinations on any age group of the population were held and the increased demand for smallpox vaccination was dealt with satisfactorily.

AMBULANCE

The Local Health Authority continued to provide full ambulance cover within its own area, and on an agency basis, full ambulance cover in the Turton Urban District on behalf of the Lancashire County Council. It also continued to provide ambulance services for the Steelworks of John Booth and Sons (Bolton) Limited, the National Coal Board for its collieries within the Borough, and for the Emergency Flying Squad situated at the Bolton District General Hospital.

General Review:

During the year under review statistics show an increased demand on the service with increases in both the number of patients carried and the mileage involved. With this increasing demand, the most noted being for the conveyance of day-care and out-patients, it is essential that close co-operation between Hospitals, General Practitioners and the Local Authority's Ambulance Service be maintained at all times to ensure an efficient and economic service.

It is significant of this demand that we have this year the highest mileage on record and only once in the year 1960 have more patients been carried by the service.

The following table shows the total mileage and the total number of patients carried during the past fifteen years.

	Total Mileage			Total Number of Patients Carried				
Year	Ambu- lances	Sitting Case Vehicles	Totals	Ambu- iances	Sitting Case Vehicles	Totals	Average Mileage per Patient	
1948			95,854			19,172	5.0	
1949			106,966			24,209	4.42	
1950	95,988	32,378	128,366	27,654	4,342	31,996	4.0	
1951	98,296	61,845	160,141	28,630	8,596	37,226	4.3	
1952	94,052	59,657	153,709	25,365	10,806	36,171	4 · 25	
1953	79,592	72,928	152,520	19,749	17,353	37,102	4 · 1	
1954	76,792	79,712	156,504	18,642	24,180	42,822	3.65	
1955	75.138	87,612	162,750	18,874	31,622	50,496	3 · 22	
1956	73,726	87,852	161,578	18,802	32,563	51,365	3 · 15	
1957	64,464	93,806	158,270	15,930	33,653	49,583	3 · 19	
1958	68,751	93,311	162,062	16,150	33,771	49,921	3 · 25	
1959	75,689	86,853	162,542	17,399	32,227	49,626	3 · 27	
1960	78,822	95,976	174,798	17,425	40,935	58,360	3.0	
1961	78,057	95,514	173,571	15,851	40,465	56,316	3.08	
1962	84,341	95,140	179,481	18,550	39,232	57,782	3 · 11	

In considering these increases it is noted that patients and mileage within the County Borough have only increased by 1.7 per cent and 2.1 per cent respectively, whilst within the Turton Urban District a marked increase of 20.6 per cent and 11.9 per cent is shown. The marked increases from the Turton Urban District are in keeping with the extra demand and also the residential development in that area.

It is noted with satisfaction that the average figure of 3.11 miles per patient for this year is only fractionally above that of last year, 3.08.

Monthly Analysis of work done by the Ambulance Service: Bolton

Month	Pa	tients carried	l by	Miles travelled by		
Wollin	Am- bulances	SittingCase Vehicles	Total	Am- bulances	Sitting Case Vehicles	Total
January February March April May June July August September October November December	1,492 1,217 1,325 1,449 1,592 1,429 1,409 1,502 1,498 1,526 1,549 1,483	2,951 2,936 3,310 2,931 3,490 3,218 2,852 3,291 2,874 3,452 2,981 2,816	4,443 4,153 4,635 4,380 5,082 4,647 4,261 4,793 4,372 4,978 4,530 4,299	6,760 5,554 6,135 5,911 6,898 5,811 5,647 6,265 6,155 6,079 6,313 6,628	6,599 6,213 6,854 6,241 6,998 7,292 6,250 6,993 6,255 7,774 6,358 5,524	13,359 11,767 12,989 12,152 13,896 13,103 11,897 13,258 12,410 13,853 12,671 12,152
Totals	17,471	37,102	54,573	74,156	79,351	153,507

Includes agency work for National Coal Board and some 'knock for knock' journeys for neighbouring authorities.

Agency Service for Lancashire County Council

(a) IN AREA OF TURTON URBAN DISTRICT COUNCIL

Month	Pat	ients carried	by	Miles travelled by			
Am- bulances		Sitting Case Vehicles Total		Am- bulances	Sitting Case Vehicles		
January	107	170	277	980	1,310	2,290	
February March	66 92	158	224	688 929	1,234	1,922	
A 11	102	173 161	265 263	1,011	1,194	2,225 2,205	
· i	102	244	353	1,047	1,424	2,203	
11110	91	181	272	873	1,183	2,056	
uly	59	200	259	596	1,641	2,237	
August	88	218	306	771	1,665	2,436	
September	71	174	245	742	1,265	2,007	
October	84	171	255	789	1,239	2,028	
November	100	164	264	837	1,327	2,164	
December	104	116	220	873	1,011	1,884	
Totals	1,073	2,130	3,203	10,136	15,789	25,925	

(b) In respect of John Booth & Sons (Bolton) Ltd.

Patients carried by			Miles travelled by			
Ambulances	Sitting Case Vehicles	Total	Ambulances	Sitting Case Vehicles	Total	
6	-	6	49	_	49	

Arrangements were made for 3 patients to be conveyed by rail.

In December the Local Authority was requested to take over the interhospital transport of patients from the Bolton Royal Infirmary. It was decided that the Ambulance Service would attempt to take over this transport for a trial period of one month commencing 1st January, 1963.

Emergency Calls:

The total number of emergency calls dealt with this year show a slight increase. In considering these cases it is noted that calls received to attend road accidents have decreased whilst calls to accidents in the home have increased. A marked increase in calls to attend fights and drunks is shown; this figure has nearly doubled for calls received within the Borough. The response to emergencies was very satisfactory. A survey taken in December showed the average time taken to reach the scene of an emergency within the Borough was 4.5 minutes.

Bolton Emergencies and Special Journeys

Type of Case	Jan	Feb	Mar	Apl	May	June	July	Aug	Sept	Oct	Nov	Dec	Total Pa- tients
ACCIDENTSINTHE HOME: Burns	6 3 31	5 3 27	8 1 38	2 2 56	2 3 33	4 7 34	3 2 36	4 4 33	2 2 34	- 3 34	6 9 35	2 6 34	44 45 425
Mishaps Poisonings Collision with struc-	1	1 -	2	4 4	5 6	8	3 2	8	4	3	6 -	6 3	35 38
tures Cuts (other than from	2	9	1	-	-	1	-	4	3	3	-	1	24
falling) Falling objects	7 2 -	6 2 2	12 1 4	11 - 6	5 - 2	6 - 1	16 - 6	8 - 2	3 1 1	8 3 2	7 - 1	7 4 1	96 13 28
bodies (other than poisons)	4	7	_	4	1	1	8	5	9	16	16	8	79
TOTAL OF ALL ACCIDENTS IN THE HOME	56	62	67	89	57	62	76	71	63	72	80	72	827
Road Accidents Collapse Industrial Accidents Sudden Illness Falls in the Street	34 79 30 40 18	41 41 22 13 25	52 56 23 11 28	80 33 10 18 24	27 45 20 27 13	46 39 19 43 12	31 54 4 25 19	54 44 18 21 20	44 46 14 32 27	63 39 22 32 34	36 40 13 26 30	55 67 13 39 51	563 583 208 327 301
Children injured at school or at play Violence—	16	28	29	32	47	54	36	46	39	38	33	15	413
Fights and Drunks Assaults Drowning	10 -	10 1 -	5 - -	13 2 -	9	9 - 1 1	10 1 -	15 - -	9 2 -	11 - -	8 1 -	13 - -	122 7 2
Falls in shops or places of entertainment Sporting Accidents Attacks by animals	1 1	1 1	2	5 2	5	2	3	- 1		5 2	2 2	2 4	1 27 14
and insects Fairground Accidents Horseriding Accidents Railway Accidents Miscellaneous	- 1 - 7	1 - - 19	3 - - 14	5 - - 11	- - - 11	3 - - 21	1 - - 16	9 - 1 - 24	- - - 5	3 - - 11	- - 11	3 - - 9	28 - 2 - 159
TOTAL EMERGENCIES	293	263	291	324	262	313	276	324	281	332	282	343	3,584
MATERNITY CASES	135	122	153	135	156	128	132	159	144	118	149	149	1,680
Long Journeys (60 miles or more)	6	5	4	4	3	9	1	5	8	5	4	4	58
TRANSPORT OF MID- WIVES AND GAS AND AIR APPARATUS	21	28	22	14	21	22	17	14	42	35	28	23	287
TRANSPORT OF TRAIN- EES TO ADULT TRAIN- ING CENTRE	44	40	44	38	46	36	24	26	38	48	45	38	467
TRANSPORT OF PATIENTS TO CHIRO-PODY CLINICS	55	45	40	57	52	47	30	34	55	68	72	45	600

Turton District Emergency and Maternity Cases

Type of Case	Jan	Feb	Mar	Apl	May	June	July	Aug	Sept	Oct	Nov	Dec	Total Pa- tients
ACCIDENTS IN THE HOME: Burns Scalds Falls	- - -	- - 1	- - 2	- - 1	<u>-</u>	- - 4	1 1 -	- - -	- - 1	- - 1	- 1 1	- - 3	1 2 16
Gas and Electricity Mishaps	-	_	-	-	_	1	-	-	_	_	_	-	1
Poisoning (other than	_	-	1	-	1	1	-	_	_	-	-	-	3
Collision with structures	- ,	-	-	_	-	-	-	_	_	-	-	1	1
Cuts (other than from falling)	1	-	-	-	-	1	-	1	-	-	2	1	6
bodies (other than poisons) Falling objects Trapping of limbs	1 1 1					1 1 1		- - -					
TOTAL OF ALL ACCI- DENTS IN THE HOME	1	1	3	1	3	7	2	1	1	1	4	5	30
Road Accidents	4 2 - 2	5 3 - -	4 1 1 1 1 -	12 -	9 1 1 1 2	6 1 1 - 1	4 2 1 - 2	6 1 - 2 3	- 3 6 3 -	5 1 1 1	- 2 1 2 -	8 3 1	63 20 12 11 10
Children injured at school or at play Sporting Accidents Horseriding Accidents		1 -	1 1 -	2 -	5 - -	2 - -	- 1 -	1 1 1	1 1 1	3 -	2 _ _	1 -	17 2
Violence— Fights and Drunks Hanging Attacks by animals and	-			1		-	-	1		-	- 1		1
insects Miscellaneous	-	-	-	-	3	- 1	2	-	- 1	_	_	-	7
TOTAL EMERGENCIES	9	10	12	15	25	19	14	14	14	12	12	18	174
MATERNITY CASES	15	8	17	6	9	7	9	12	15	8	11	12	129
Long Journeys (60 miles or more)	-	-	-	-	-	-	-	-	-	-	-	1	1

National Coal Board

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov		Total Pa- tients
Industrial Accidents	3	1	2	4	1	4	2	4	2	1	1	2	27

Total Mileage for Collieries ... 241

Vehicle Strength at 31st December, 1962:

Make	H.P.	Reg. No.	Purchase Date	Total Mileage
AMBULANCES: Austin Austin Austin Austin Austin Austin Austin Austin Austin	27 16 16 16 16 16	EWH 345 JWH 660 JWH 699 LBN 22 MWH 100 MWH 101	23. 8.51 9. 3.56 9. 3.56 20. 7.57 29. 4.58 29. 4.58	90,750 82,123 86,773 87,317 59,228 62,222
SITTING CASE AMBULANCES: Morris Austin Austin Bedford Bedford	16 16 16 14 14	HWH 499 VBN 376 PBN 30 PWH 979 LBN 20 LBN 21	6. 4.55 4. 4.62 24. 9.59 28. 3.60 8. 3.57 21. 3.57	86,236 9,463 42,570 61,087 97,282 100,283
SITTING CASE CAR: Austin	Diesel ·	TWH 746	24. 4.61	18,369

A new Austin sitting case vehicle was delivered on the 4th April. This was designed to cater for the day-care patients attending the Bolton District General Hospital.

With the increasing demand for the transport of sitting case patients, the emphasis on future designs must be based on maximum seating capacity with vehicles filling a dual-purpose role.

The mileage of some of the older ambulances suggests that consideration will have to be given to their replacement probably in the year 1964.

Accident and Insurance Claims:

During 1962 no accident or incident directly or indirectly involving ambulance vehicles was reported for insurance claim purposes.

Petrol and Oil Consumption:

A total of 12,204 gallons of petrol and 1,350 pints of oil were used during the year. Average performance of all ambulance service vehicles, which all use Commercial Grade petrol, was 15.5 m.p.g.

Maintenance and Repair of Vehicles:

All Health Department vehicles continue to be maintained and repaired in the ambulance service workshops. A new maintenance system adopted in November ensures that all Health Department and Ambulance Service vehicles are checked and serviced once per month.

Liaison Officer (Bolton Royal Infirmary):

The ambulance liaison officer continues to play a very important part in the efficient control of ambulance patients attending this hospital. A total of 22,502 ambulance cases were booked through this office during the year.

Ambulance Control Room:

The control continues to be used for a variety of services outside normal working hours, e.g. messages for district nurses and general practitioners, requests for the emergency transport of midwives, oxygen and the Hospital Flying Squad.

A reorganisation within the control room towards the latter part of the year made it more convenient for controllers to deal with the increasing number of calls. Consideration may have to be given in the future for additional controlling staff as it would appear the employment of one man during the peak day periods is insufficient to maintain an effective control.

Civil Defence - Ambulance and First Aid Section:

There were 93 volunteer members of whom 21 had completed their standard training and 42 were partly trained.

Three exercises, in co-operation with other sections of the Corps, were held during the year at Southport, Euxton, and Bolton.

The Ambulance Superintendent and three shift leaders are certificated instructors to this section.

The Deputy Medical Officer of Health, an Assistant Medical Officer of Health, and members of the Borough Ambulance Service were responsible for first aid training, and the Deputy Superintendent of the Home Nursing Service lectured on Home Nursing to members of the Welfare Section.

Three ambulances were available for training purposes and exercises.

PREVENTION OF ILLNESS, CARE AND AFTER - CARE

Health Education:

A considerable part of the work of the Health Department is concerned with health education much of it being in the form of advice to individual members of the public, e.g. by health visitors and public health inspectors in the course of their ordinary duties. More general health education is also undertaken. One of our most difficult tasks is to bring home the clear association between cigarette smoking and lung cancer.

At the end of 1961 the heads of sections of the department met to discuss the year's health education activities and to consider the programme for 1962. This was arranged so that some subjects would cover a period of two months and others one month. During the year special attention was paid to the following.

Immunisation; smoking and lung cancer; poliomyelitis vaccination;

food hygiene; dental health; clean air; home safety.

Posters pointing out the need for vaccination against poliomyelitis and the relationship between smoking and lung cancer were distributed to local firms and youth clubs. In October, the licensed victuallers agreed to display posters relating to venereal diseases. These posters were also distributed to snack bars and clubs frequented by young people.

A display window has been made in the wall of the Ambulance Station in Blackhorse Street and this has been used throughout the year. Poster display boards have been erected both inside and outside various Health Department establishments.

In September a film on the mouth-to-mouth method of respiration was shown to the staff of all sections of the department.

Occasional meetings continued to be held between representatives of the Teachers' Associations and the Principal School Medical Officer and Principal School Dental Officer to discuss health education in schools. Posters for display in schools, and leaflets for parents on dental hygiene and smoking and lung cancer were again distributed to schools. In December, a letter dealing with the incidence of venereal diseases among the 14 - 21 age group was sent to head teachers of local authority secondary schools, and arrangements were made for medical officers and health visitors to give talks to senior pupils, if requested.

A Dental Health Exhibition, similar to those arranged in previous years, was held for one week during July and was visited by 1,200 school children.

Parties of school children have visited the Health Department for talks on the health services, and have been shown the work of the Borough Analyst's laboratory. Medical officers have also given talks to pupils in two grammar schools and to members of a Youth Club.

The heads of sections again met at the end of the year to decide the subjects to which special attention should be paid during 1963.

Loan of Nursing Equipment:

Article	Number Available	No. issued during the year	No. in stock at 31st Dec. 1961
Bed Pans	162	234	5
Rubber Bed Pans	5	3	_
Air Rings	136	109	7
Tan Sad Invalid Chairs	55	30	ģ
Junior do	7	2	_
Self-propelled Chairs	3	$\bar{2}$	1
Bed Rests	151	134	8
Bed Cradles	19	19	8 2
Single Beds	10	13	$\tilde{6}$
Iron Lifting Poles	6	6	6
/	2	_	ĭ
Cot—Senior	$\tilde{2}$	_	i
Cot—Junior	ī	_	_
Mattresses—Sectional, Dunlopiilo	1	_	1
,, —Hair and Interior Spring	9	7	8
"—Dunlopillo	15	8	4
Cushion—Float-on-Air	1	<u> </u>	i
Biscuit Mattresses	$\dot{\hat{\mathbf{z}}}$		_
Mattress Covers—Cotton	ą	2	2
,, ,, —Plastic	12	16	2 2
Pillows—Feather and Flock	i5	_	12
,, —Dunlopillo	1	_	12
Bedspreads	6	_	6
Blankets	21		13
Bed Sheets	4	_	4
Draw Sheets	905	720	386
Pillow Cases	39	4	36
", "—Plastic	10	ī	5
Pyjama Jackets	95	106	22
Trousers	3	100	3
Rubber Sheets	464	318	29
77	12	2	7
TT * 1	111	98	í
n .	111	16	7
	17	27	
0 1 01 1 0 10 11 1	17	21	ī
	22	9	20
FD : 1 1977 11 : 0 : 1	5	7	20
- 1	1	_	
Bonaped Walking Aid	66	77	5
Talls (with hus)	00		J

10	tai	number	OI	articles	issuea	ın	1962	
,	,	,,	,,	,,	,,	,,	1961	
,	,	,,	,,	32	35	••	1960	
	,	,,	,,	,,	,,	,,	1959	
	,	,,	,,	,,	,,	,,	1958	
	,	,,	,,	,,	,,	,,	1957	
	,	,,	,,	,,	,,	,,	1956	
	,	,,	,,	,,	,,	,,	1955	
	,	,,	,,	,,	,,	,,	1954	
1								

Convalescent Home Accommodation:

During the year there were 18 applications for convalescence for 15 adults and 3 children. All applicants were interviewed as to their suitability for convalescence by medical officers of the department.

Thirteen adults and one child were accepted for periods of two weeks and of these, 10 adults and one child were admitted to the Bolton and District Hospital Saturday Council's Homes at Blackpool, St. Annes-on-Sea and Southport. The remainder were sent to various other homes.

The Local Health Authority paid full fees for accommodation in 11 cases and 3 applicants paid part cost.

Chiropody:

Chiropody was provided for the elderly, the physically handicapped, and expectant mothers. The service has grown since its inception on the 1st April, 1960, and sixteen clinic sessions are now held each week in the Welfare Department premises. The Old People's Welfare Council operate the service for old people and receive a grant from the Bolton Borough Council. The Health Committee provide free service for the physically handicapped, expectant mothers, and those on National Assistance. Other cases are charged 3s. 0d. per treatment. A domiciliary service is available, on their doctors' recommendation, for those in the above classes who cannot travel to the clinic, and sitting case ambulance transport is available for those who cannot go by public transport. The number of cases treated at home has increased considerably since the service began.

The department is indebted to the very full co-operation given by the Old People's Welfare Council to whom I give my sincere thanks. The Welfare Committee and their Chief Officer, Mr. K. Davies, have also been most helpful in allowing the clinic to continue in the Welfare Department premises. My thanks are also due to Mrs. L. A. Crossley, the Honorary Secretary of the Bolton District Branch of the Society of Chiropodists, for her very willing assistance.

Details of the number of treatments, together with the numbers for 1960 and 1961, are given below:

		Nu	mber of t	reatments gi	No. of	Total		
Manch			Free	1	Paying		domiciliary	clinic and
Month		Aged	Handi- capped	Expectant Mothers	Aged	Total	treatments	domiciliary treatments
February		335 279 349 280 350 338 253 385 298 394 394 314	29 28 27 28 28 39 12 39 14 40 28 26		329 332 371 297 398 377 235 409 306 415 371 307	693 639 747 605 776 754 500 833 618 850 793 647	81 107 82 100 99 105 84 123 106 140 131	774 746 829 705 875 859 584 956 724 990 924 768
TOTAL: .		3,969	338	1	4,147	8,455	1,279	9,734
1961 1960 (April -	·	3,522	271	2	4,046	7,841	755	8,596
T) 1 1		1,753	199	1	3,247	5,200	333	5,533

The total number of patients treated at the clinics during the year was 1,477, and the total number of patients treated at home was 303.

HOME HELP

The number of households receiving assistance during the year totalled 1,479. Eight hundred and fifty seven new applications were received but in 248 cases help was not given for a variety of reasons. For example, satisfactory arrangements were made privately in some cases, a number of patients decided to stay with relatives, while some requests were purely for domestic assistance, the applicants being under the impression that help could be allocated to any type of home.

Increased national publicity resulted in many applications being made direct to the Home Help Service when they should have been made to another service. These were directed to the appropriate agency.

The heavy demand on the service inevitably means that preventative work which might fall within the scope of the service cannot be granted, help only being allocated where there is definite ill-health or infirmity.

Approximately 40 per cent of the requests came from the patients themselves, their relatives or their friends.

Source of Applications: (Expressed in percentages)

General Practitioners		25.32
	• •	
Self		19.84
Relatives		14.24
Health Visitors		9.68
Hospital Almoners		8.75
National Assistance Board		5.25
Welfare Officers		4.55
Friends		6.53
District Nurses		3.27
Children's Officer and		
Co-ordinating Committee		1.17
Mental Health Officers		1.40

Cases for whom help was provided during the last four years:

	1959	1960	1961	1962
Maternity Tuberculosis Chronic Sick, Aged and Infirm Other cases	41 6 1,131 78	42 8 1,190 124	62 11 1,293 121	66 12 1,292 109
Totals	1,256	1,364	1,487	1,479

The major group requiring help continues to be the aged and infirm, though the maternity section once again shows a slight increase.

Payment for Service:

The maximum charge for the service continued at 3s. 0d. per hour. It is felt, however, that the time is approaching when an increase should be made in the hourly charge as it is felt that it should be slightly above the rate for private domestic cleaners.

Summary of Payment for Service

	Free	Part Cost	Standard Charge
Maternity	12	20	34
Tuberculosis	12	-	_
Chronic Sick	1,101	77	114
Other Cases	70	8	31
TOTALS	1,195	105	179

The number of patients paying for the service shows a slight increase on last year.

Night Attendant Service:

Although help is not extensively required, the provision of a night attendant is essential in emergency cases where the patient might otherwise die alone. Nineteen patients received 65 nights of service.

Special Family Help Service for Problem Families:

Twelve families received free assistance from home helps specially trained for work with problem families. Service was terminated in one case as the child for whom help was provided had been admitted to a mental hospital. In two other cases the service was suspended to see whether the householders could manage without the support of the home help.

Staff:

The total number of home helps employed during the year was equivalent to 105 full-time helps.

The training course for home helps was held on Wednesday afternoon each week from September to March. The course included practical work, e.g. cooking on one gas jet, preparation of economical but nourishing meals, invalid cookery. Lectures were given by senior officers of the Health Department, Children's Department, National Assistance Board, and other agencies concerned with the welfare of the public.

MENTAL HEALTH

The Mental Health Service continued to work effectively during the year although at times hampered by staff difficulties. A tribute to the development of the service was made in July, when, in a debate in the House of Lords on the working of the Mental Health Act, Lord Grenville referred to Bolton as one of three County Boroughs who were doing particularly well in the development of services under the new Act. The service was honoured on the 27th September when the Training Centres were visited by the Minister of Health, the Right Honourable J. Enoch Powell, M.P., accompanied by Ministry officials and the two local Members of Parliament.

The building of the new hostel for 50 elderly mentally disordered people commenced during the year and it should be ready for occupation before the end of 1963. Intensive efforts were made to secure two sites for hostels for the mentally subnormal with little success. The possible adaptation of a large house already owned by the Council is now under consideration. The work of the adult training centre continued to progress satisfactorily and for the first time, some of the trainees were placed in outside employment. By the end of the year, seven trainees had been found work outside the Centre, the majority of them for the first time in their lives, and although two of the trainees had to return to the centre when their work finished, it is hoped that as the general labour situation improves, further trainees will be placed in employment. In the junior training centre over-crowding is becoming a major factor and early consideration will have to be given to the provision of additional accommodation.

Case-work by the mental welfare officers continued at a high level and for the first time for several years the total number of patients admitted to mental hospitals from Bolton dropped. The new arrangements for applying for admission for the subnormal direct to the hospital instead of to the Regional Hospital Board worked effectively and by the end of the year the only patients awaiting admission were very low grade children.

Staff:

After many years of waiting, training and qualification of mental welfare officers has now been facilitated by the establishment of two year courses in colleges of Commerce. One of the mental welfare officers commenced the two year course at the Manchester College of Commerce and the staff situation is likely to be affected for several years until all the mental welfare officers are trained and qualified. To assist in covering this deficiency, a welfare assistant was appointed but this welfare assistant too will need to be seconded for training in due course. The trainee Assistant Supervisor of the junior centre commenced the one year course for teachers of the mentally handicapped run by the National Association for Mental Health in Manchester. This will probably be the last one year course for assistant supervisors and any future trainees will need to take a two year course. The staff situation on the 31st December was:

Junior Training Centre

{ | Supervisor | 3 Assistant Supervisors | 1 Trainee Assistant Supervisor | 2 Part-time Guide Assistants | 2 Part-time Domestics |

| Adult Training Centre | | Supervisor | 4 Instructors | 3 Guide Attendants | 1 Cook | 2 Part-time Domestics | 2 Part-time Domestics | 3 P

Liaison:

Liaison between the local health authority and the hospitals concerned with the care of Bolton patients was maintained at a very high level. The established conferences at Townleys Hospital between the mental welfare officers and the medical and nursing staff at the hospital continue to be held fortnightly and these meetings in addition to helping to ease administrative problems, also served to keep the mental welfare officers abreast of hospital developments.

The relationship with Dr. D. J. Rose, Consultant Psychiatrist, Brockhall Hospital and his staff was further improved under the new arrangements for applying direct to him for hospital accommodation for the subnormal and severely subnormal, and the monthly clinic at the Health Department facilitates regular discussion between the medical staff of Brockhall Hospital and the local authority officers in addition to its screening and diagnostic function.

Liaison with the medical practitioners of the town was in most cases very satisfactory, this being carried out by personal contact between the mental welfare officers and the general practitioners over cases needing attention. The full benefit of community care can only be given to patients by full co-operation between other statutory and voluntary agencies, and particularly with other sections of the Health Department, and this co-operation was readily forthcoming.

Mental Illness

Hospital Admissions:

Total Number of Patients admitted to Psychiatric Hospitals

Method of Admission	Under	65 years	65 years	Total	
	Male	Female	Male	Female	
Mental Health Act, 1959 Informal	98 11 1 28 1	84 11 1 31	26 - - 3 -	39 2 - 3 -	247 24 2 65 1
TOTALS	139	127	29	44	339

For the first time for four years there was a decrease in the total number of patients admitted to psychiatric hospitals. This decrease of 11.5 per cent did not, however, bring the number of admissions down to the annual level prior to 1961. The decrease was mainly in the number of female patients admitted, both patients under 65 and those over 65, and this may be accounted for by the shortage of beds for female patients. Although no major difficulties were experienced with regard to admissions, there were always two or three elderly female patients on the waiting list for admission.

88.2 per cent of all admissions were to Townleys Hospital and 63 per cent of all admissions were informal. Of the compulsory admissions, only two patients were admitted under Section 26 requiring compulsory detention for a period exceeding one month, and of the admissions under Section 25 and Section 29, only in one instance was it necessary to proceed to obtain detention under Section 26. One patient was admitted under Section 60 from the Courts.

Cases reported to Health Department for investigation:

	Under	65 years	65 years	and over	Total
Reported by—	Male	Female	Male	Female	
Medical Practitioners	33	54	16	19	122
Relatives	18 18	27 6	1	9 4	55 29
Consultants and Hospitals Others	28 12	20 16	5 1	11 14	64 43
Totals	109	123	24	57	313
DISPOSAL— ADMITTED TO HOSPITAL— Informally Under Section 25 Mental Health Act Under Section 26 Mental Health Act Under Section 29 Mental Health Act Under Section 60 Mental Health Act On waiting list.	19 11 1 28 1	22 11 1 31 -	7 - 3	16 2 3 3	64 24 2 65 1 4
Referred for Psychiatric Opinion Placed under Community Care	18 12 -	14 28 -	2 6 2	6 15 1	40 61 3
Health Service					
Totals	109	123	24	57	313

The number of cases reported to the Health Department for investigation again showed a slight increase from 301 to 313, but a smaller number required admission to hospital. An increased proportion were dealt with by referral for psychiatric opinion, by casework to support them in the community or by social work to solve immediate problems and render no further action necessary. The

general care of patients in the community was maintained at a high standard, but due to staff difficulties during the year, the total number of visits dropped.

	1961	1962
Visits to investigate cases reported	392	372
Community care visits	2,005	1,789
Visits to complete social histories	2	11
Totals:	2,399	2,172

Psychiatric Social Club:

The Psychiatric Social Club is now so well established that there was little of significance to report during the year. The Club Committee under the chairmanship of one of the mental welfare officers, maintained the usual high standard in programmes, providing a variety of speakers, discussions, films and social evenings. The Bolton Rotary Club assisted in providing a regular supply of speakers on interesting topics and several local artists gave freely of their time to entertain on social evenings. The annual Christmas Party, which is a happy re-union with many old members who are now well settled in the community, again provided a very enjoyable evening, but the demand for attendance at the Christmas Party is now so great that invitations have to be restricted.

Mental Subnormality and Severe Subnormality

Community Care:

Community care of the subnormal and severely subnormal continued at a satisfactory level, but the number of visits fell due to the temporary staff shortage. 45 new cases were referred during the year, maintaining the steady increase in referrals over the last few years.

One adult male who appeared before the Courts was dealt with by being placed under the guardianship of the local authority, thus enabling him to contiue living at home and carrying on with his work. One female before the Courts, however, had to be sent to hospital because of unsuitable home conditions, but could have been dealt with by guardianship had a suitable hostel been available. The guardianship Order in respect of another adult female, made when she was discharged from hospital, was allowed to lapse as she was well settled in the community.

The new arrangements whereby application for admission of subnormal and severely subnormal patients to hospital is made direct to Brockhall Hospital, coupled with the monthly clinic held in the Civic Centre at Bolton by the Consultant Psychiatrist from Brockhall, means that an excellent service is now available. Short term care was more readily obtained to relieve relatives in emergencies and to facilitate further observation of patients seen at the clinic. Patients on licence from the hospital were supervised in conjunction with the Social Worker from Brockhall Hospital.

12 male and 3 female patients were admitted to hospital for long term care, all but one being admitted on an informal basis. There is still a shortage of accommodation, however, for young, severely handicapped patients and the waiting list which had increased by 3 by the end of the year, consists mainly of these low grade patients under the age of sixteen years. Of the patients admitted to hospital, at least 1 female and 5 males could have been coped with in the community had a hostel been available.

In addition to regular visits by the mental welfare officers, one of the medical officers of the department visited those patients who were not in employment and were not attending the training centres. Visits to the mentally subnormal carried out were:

	1961	1962
To those under community care	 930	796
At the request of hospitals	 191	133

Mental Health Act, 1959

New Cases Reported by— Local Education Authority	MALE	FEMALE	TOTAL
Section 57 Education Act, 1944	4	6	10
School Leavers	18	6	24
Relatives	3	2	5
Other Sources	2	4	6
Totals	27	18	45
DISPOSAL OF ABOVE CASES— No further action required Placed under community care Admitted to hospital informally Admitted to hospital, Section 61 Mental Health Act	10 16 1	5 10 1	15 26 2
Died	-	1	1
Totals	27	18	45

Number of Subnormal and Severely Subnormal Persons receiving care on the 31st December, 1962

			 245	224	469
Community Care	 	 	 146	131	277
In hospitals	 	 	 99	93	192
			MALE	Female	TOTAL

Classification of Severely Subnormal Persons awaiting Hospital Care on 31st December, 1962

	Under	16 years	Over 1	Total	
	Male	Female	Male	Female	
IN URGENT NEED: Cot and chair cases	-	2	-	-	2
NOT IN URGENT NEED: Cot and chair cases	2	3 -	- 1	1 -	6 2
Totals	3	6	1	1	11

Junior Training Centre:

The recognised high standard of training at the Junior centre was maintained and this is a tribute to the staff who were at times working under difficulties. The centre is split into four classes and with the trainee assistant away on a twelve month course, one class had to be taken by the Supervisor in conjunction with her administrative duties assisted by one of the guide assistants. This meant that during times when other members of the staff were temporarily absent through sickness, classes had to be amalgamated. On the 31st December, 1962, there were 34 males and 23 females on the register and the average daily attendance during the year was 85 per cent. This number is increasing and arrangements were already in hand at the end of the year to provide more cloakroom and toilet space, but as numbers increase it is doubtful whether even this will be adequate, and consideration will shortly have to be given to building additional accommodation.

In spite of the additional heating, the temperature in the centre is still below that desired in very cold weather, and if this building is to be continued as a junior training centre for any length of time, consideration will have to be given to the costly installation of insulation material.

The clergy of St. Thomas's Church, Halliwell, continued to take an active interest in the centre, both by attending to take occasional services, and by allowing the children from the centre to use the Church playing fields. The Harvest Festival Service and the Christmas Nativity Play were again attended by a large appreciative audience of parents and friends and the high standard of the performance of the children was a tribute to the staff.

With so many young children now attending the centre it was decided that it was undesirable to take them on a week's holiday. In lieu of the holiday, several day outings were arranged including coach trips to Chester Zoo and Rivington Barn, and these were very much enjoyed by the children. The Bolton Society for the Mentally Handicapped again invited all the children from the centre to attend their Christmas Party and along with other local organisations, contributed in many ways to the provision of extra comforts for the children.

Adult Training Centre:

The adult training centre is now well established and on the 31st December, 1962 there were 26 male and 16 female trainees on the register and the numbers were steadily increasing. The centre continues to be of interest to other local authorities who are planning adult centres, and during the year several parties of visitors were shown round the centre.

The usual crafts such as brush making and basketwork have been abandoned as it is no longer possible to buy raw materials at a competitive price to enable the goods made to be sold profitably. The work has mainly concentrated on the production of items for which there is a ready sale. These include extending clothes props, seed boxes, chain link fencing, scatter cushions and nylon fur rugs. The greenhouse has been extended and there was a considerable sale of plants grown from seed and tomatoes grown in the greenhouse. The main contract job of producing bar spacers for the reinforced concrete industry continued and the income from this averaged £8 per week. A small amount of other sub-contract work was undertaken such as folding and packeting grease-proof paper. Although this work is not well paid it provides a very useful occupation for the more severely handicapped trainees.

It became obvious during the year that there were not sufficient high grade girls available to staff an economical laundry unit and the room which had previously been earmarked for laundry equipment was, with practical and financial assistance from the Bolton Society for Mentally Handicapped, converted into a flat containing a bed sitting room and a kitchen. By the end of the year this unit was being used to give the type of domestic training required to enable the trainees to be more self-supporting in their own homes or in hostels when they become available.

During the year 4 male and 3 female trainees who had been attending the centre, were placed in jobs and for the first time in their lives were able to earn their own living. Two of the male trainees unfortunately had to return to the centre at a later date when the work they were doing finished, but the benefit of training has been proved and with co-operation from local employers, more trainees should be able to earn their own living in the future.

The importance of recreational activity was not overlooked and one hour each day was put aside for this purpose. In May, a party of 30 trainees were taken by the staff to a hotel in St. Annes where they enjoyed a week's holiday. In co-operation with the Parents' Association, a Social Club for the trainees was held once a month on a Wednesday evening and this Club was very well attended.

Special Care Unit:

On the 31st December, 4 trainees from the register of the adult centre and 8 trainees from the register of the junior centre were being cared for in the Special Care Unit. Activities in this unit are still experimental but a pattern is beginning to develop which indicates that the time will soon arrive when the unit will have to be split. All those in this unit are virtually untrainable due either to a severe mental handicap or to the double handicap of mental and physical disability. Six of the group are ambulant and very energetic and need some form of occupation which satisfies them and the need for them to expend some of their energy, whereas the other members of the group are so physically handicapped that they require a more sedentary type of occupation or amusement. During good weather the two groups can be taken outside in turn and this dual role can be carried out, but when the weather is bad, both groups have to be in doors in the same room and it is not possible to allow the active group to perform any vigorous activities without detriment to the welfare of those who are physically handicapped. The activity of the group is at the moment restricted to simple play therapy and the physiotherapist visits the unit regularly to give exercises to those in need.

REPORT BY THE MEDICAL OFFICER OF HEALTH TO THE HEALTH COMMITTEE ON THE DEVELOPMENT OF LOCAL AUTHORITY HEALTH AND WELFARE SERVICES

Ministry of Health Circular 2/62

Introduction

The circular points out that the report "A Hospital Plan for England and Wales" published this year, emphasises that where illness or disability cannot be forestalled by preventive measures, care at home and in the community, rather than in hospital, should always be the aim except where there is a need for diagnosis, treatment and care of a type which only a hospital can provide. The circular goes on to state that the local authority services need to be planned for the same period ahead as the hospital service and the Minister asks the Council to review its health and welfare services and to draw up a plan for developing them over the next ten years. The plan will need to lock with the plans of the hospital authorities and consultations should take place with them, with the Executive Council and the Local Medical Committee.

With regard to capital expenditure, the circular states that as explained in Circular 21/61, even in present conditions of stringency, loan sanction will, if possible be recommended for health and welfare projects which are essential as making a useful addition to the facilities for care in the community. No firm indication for the future can yet be given, but in preparing their plans the Authority should proceed on the footing that loan sanctions for projects which satisfy these criteria will continue to be given at not less than the present rate.

With regard to current expenditure, again as explained in Circular 21/61, the Government envisages the growth and expenditure on local authority health and welfare services as running at a rate of about $2\frac{1}{2}$ per cent per annum in real terms. The growth of hospital current expenditure has been planned at 2 per cent per annum in order to enable local health and welfare services to expand rather faster.

The plan is to be summarised as in the appendices to this report and has to be revised annually, on each occasion being taken a year further forward.

In preparing the plan, appropriate consultations have taken place. For example, the Medical Officer of Health and Chief Welfare Officer, have discussed the provision of domiciliary services for the aged. These have also been discussed at periodical meetings of officers dealing with the aged—Consultant Psychiatrist, Geriatrician, Secretary of the Bolton and District Hospital Management Committee, Medical Officer of Health, Chief Welfare Officer Housing Manager and representatives of Bolton's general practitioners. The Medical Officer of Health has brought the subject of the Local Authority's Health Services before the Local Medical Committee and the views of the local consultants have been obtained on the domiciliary health services. The provision of the domiciliary psychiatric services and hostel provision has been discussed with the Consultant Psychiatrist. The local Hospital Management Committee is of the opinion that earlier discharge of patients from hospital, including maternity patients, is likely but no figures are available nor can they be expected.

It would seem that an increase in some of the domiciliary services will be necessary, but the extent is difficult to forecast and the figures given in the second five years of the plan may well be subject to considerable modification.

POPULATION:

Development of the domiciliary services will depend on the population and its composition. The 1961 census population of 160,740 has been taken as the population for each of the ten years. The Registrar General's estimate of those aged 65 and over has been used, namely 19,400 in mid June 1960. By 1970 this would rise by a sixth giving a figure of 22,600 and by 1975 there would be a rise of 28 per cent giving 24,800. The percentage increases apply to the country as a whole and not necessarily to Bolton, but they can be accepted as giving a fairly reasonable estimate. The increases for the intermediate years have been calculated from them.

To deal with each service in turn.—

Section 21 - Health Centres:

There are no health centres as such in Bolton, that is, premises provided by the Local Health Authority and used by hospital, local authority staff and general practitioners. From earlier discussions it does not seem likely that there will be a demand for health centres in Bolton during the next ten years and none has been included in the plan.

Section 22 - Care of Mothers and Young Children:

Apart from the developments stated below, the service will continue as at present.

It is desirable that better means of liaison and obtaining advice from Dr. Dickson, the Consultant Paediatrician, be established. This can be done in two ways—by one of our Assistant Medical Officers attending Dr. Dickson's weekly clinic at which he sees handicapped children at the Bolton District General Hospital, and by Dr. Dickson holding in the Civic Centre a weekly consultative clinic where he would be available to see children on our register of handicapped children and give general advice on paediatrics. Dr. Dickson would be paid the usual sessional fee. Such arrangements were included in the Authority's proposals under the National Health Service Act, 1946 and are in accordance with what is happening in many other local authority areas.

Bolton is served by the following clinic premises:—

Civic Centre - a good clinic where all types of health department clinic sessions are held.

Astley Bridge - converted council offices used jointly for school and health clinics.

The Withins - a converted house used for school and health clinics.

Child welfare clinics are held in ten church hall premises throughout the town. These are unsatisfactory in various degrees but have to be accepted as the best available.

New clinics are required in:-

1. The Lever Edge Lane district. This would be a combined health and school clinic serving the local population, and also the large number of school children attending this school base.

An attempt is being made to secure accommodation in existing premises at a capital cost not exceeding £10,000 during 1963/64.

- 2. There will be a need for a fairly large clinic serving both health and school purposes in the Halliwell area. A site has not yet been fixed. It will depend on the extent of slum clearance and the use of the land made available following slum clearance. The clinic would either be on part of the land which is cleared by slum clearance or further from the centre of the town toward Smithills Schools. There is no urgent need for this clinic at the moment. It might be built say in six years. The present cost would be approximately £29,600.
- 3. A clinic is likely to be required eventually on the Breightmet Estate. This has not been included in the present plan.

No other developments in this service costing additional money are foreseen for the moment.

Section 23 – Midwifery, including expenditure as Local Supervising Authority:

There is an establishment of 10 midwives. Nine are employed at present and this number is adequate. Domiciliary midwifery is likely to increase because of:

- 1. Increased birth rate due, among other things, to a larger number of individuals of fertile age.
- 2. The likelihood of earlier discharge of patients delivered in hospital.
- 3. In recent years over 80 per cent of Bolton mothers have had their babies in hospital. This percentage may very well decrease.

It is impossible to forecast, with any degree of accuracy, the increase but provisionally an additional midwife has been included in 1963/64, i.e. 10 in all, a second in 1966/67, and a third in 1969/70.

Three ante-natal clinics are held in the Civic Centre weekly, each conducted by one of the whole-time medical staff and domiciliary midwives. As general practitioners develop their own ante-natal clinics the number held in the Civic Centre may be reduced.

As recommended in the Report of the Maternity Services Committee (Cranbrook Report), 1959, it is hoped to arrange interchange between hospital and domiciliary staff.

SECTION 24-HEALTH VISITING:

At present the number of health visitors employed is $31\frac{1}{2}$. It seems probable that health visitors will work increasingly in greater association with general practitioners, in some cases attending their surgeries, but the establishment of 43 health visitors would seem to be adequate throughout the ten years and no change is recommended. It should be explained that one-third of their time is spent on school work and this has been allowed for in the appendix.

SECTION 25-HOME NURSING:

There has recently been some decrease in the number of cases and visits though the work on the whole has tended to become heavier because of the increased number of old people who inevitably require a greater degree of nursing than young folk. The district nurses in Bolton spend approximately 60 per cent of their time nursing those aged 65 and over and to allow for nursing the larger number of old folk, 3 additional nurses (32 plus 2 administrative staff) will be necessary in 1972 with appropriate changes in the intervening years. Because of earlier discharge of patients from hospital further increases of staff may be necessary but it is impossible to be sure about this and its possible effect has not been considered in calculating the number of nurses required.

Section 26-Vaccination and Immunisation:

It is probable that local authorities will be required to provide immunisation against other diseases, e. g. measles, but it is impossible to give a figure for the additional cost. Otherwise, the service will continue as at present.

SECTION 27-AMBULANCE SERVICE:

Until the middle of last year both the number of patients carried and the mileage travelled were increasing yearly but recently there has been some decrease. As far as can be seen at present, both the numbers of vehicles and staff should be adequate during the next ten years but should more patients have to be carried and additional miles run, additions may be necessary. The ambulance station is unsuitable in many ways. As its site is likely to be replanned within the next ten years, provision for its replacement has been included towards the end of the ten year plan.

Section 28-Prevention of Illness, Care and After Care (excluding Mental Health):

Apart from the Mental Health Services few developments are likely, e.g. an increase in the Chiropody Service at slight additional cost.

MENTAL HEALTH

- 1. MENTAL WELFARE OFFICERS. The present establishment is:-
 - 1 Chief Mental Health Officer
 - 1 Senior Mental Health Officer
 - 3 Mental Welfare Officers

An increase of one mental welfare officer and one welfare assistant will be necessary. It is hoped to appoint the welfare assistant in the autumn of this year and the mental welfare officer probably within the next two years. In due course it is hoped that all the staff will hold appropriate qualifications.

2. TRAINING CENTRES.

JUNIOR TRAINING CENTRE. The Borough Architect is of the opinion that the useful life of the Junior Training Centre building is at least twelve to fifteen years. The building will accommodate 53 children. The number attending the centre is steadily increasing and within the next few years another room to take 15 children will have to be built and an additional member of staff appointed.

ADULT TRAINING CENTRE. The Adult Training Centre is satisfactory. A Senior Assistant Supervisor will be appointed within the next few years, say 1965/1966.

3. Hostels. The present programme of three hostels, one whose building is about to start for 50 mentally disturbed old people, a hostel for 24 younger males which it is hoped to begin in 1963/1964, and a hostel for 24 younger females to start the following year, may be adequate. Until it is seen how these work and to what extent they meet the need, further hostels cannot be planned. However, there may be a need for one or possibly two more small hostels, e.g. ordinary houses, for mentally ill patients as opposed to those patients suffering from mental subnormality. We hope that some of these patients will be accommodated in the hostels for younger males and younger females but this may be impracticable in some cases.

SECTION 29-DOMESTIC HELP

Although there have been increases in recent years from 94 to 100 in December 1959 and to 105 in 1961/62, the number of home helps is at present inadequate. Cases on the books have increased from 739 in February 1959 to 922 in March 1962. With more domiciliary midwifery there has recently been a rise, from 42 in 1960 to 62 in 1961 in the number of maternity cases receiving help. This trend is likely to continue. Mental health cases will also increase. It would seem that at least an additional 7 helps should be employed in 1963/64. Ninety-five per cent of home helps' time is at present devoted to old people and with the increase of old folk from 19,400 to 23,500 in 1972 the number of home helps required in 1972 would be 131 with corresponding increases in the intervening years. In 1969/70 when 126 helps are proposed, an additional case worker will be necessary. In arriving at future needs we have borne in mind the Housing Committee's policy of providing wardens to assist old people on certain estates and the probability of a meals on wheels service being established, but neither of these services can provide the assistance to old folk in their homes nor the house cleaning undertaken by home helps and they are unlikely to alter significantly the requirements of the Home Help Service.

In Circular 7/62—Development of Local Authority Health and Welfare Services, the Minister asks all local health and welfare authorities to give fresh thought to the work which voluntary organisations are already doing and to consider what further or other work they can suitably be invited to undertake. The Department receives help from voluntary workers in two main ways—at the child welfare centres where many of the helpers belong to the Women's Voluntary Service, and at the chiropody clinics where voluntary workers give bookings and keep the registers. Discussions have taken place with the Organiser of the local branch of the Women's Voluntary Services with a view to more workers coming to child welfare clinics. We also receive assistance from time to time from various voluntary bodies such as the Bolton Guild of Help, the Bolton Moral Welfare Association and the Bolton Marriage Guidance Council. It is not thought that further consultations are necessary at present.

WORK STILL REQUIRING TO BE DONE AFTER THE END OF THE TEN YEAR PERIOD:

1. The Junior Training Centre at Cotton Street will need to be rebuilt.

2. Possibly additional hostels for the mentally ill will be necessary.

A. I. ROSS,

Medical Officer of Health

LOCAL HEALTH SERVICES Part 1

Net Revenue Expenditure

(Including loan charges and capital expenditure from revenue)

Service	Estimate for 1962–3	Estimate for 1963–4	Estimate for 1964–5	Estimate for 1965–6	Estimate for 1966–7	Approximate Estimate for 1971–2
Health Centres	3	- J	3	3	<u>ب</u> ا بك	3
Care of Mothers and Young Children	41,065	42,260	43,900	43,900	43,900	46,725
Midwifery including expenditure as Local Supervising Authority	11,860	12,860	12,860	12,860	13,860	14,860
Health Visiting	14,490	15,915	16,625	16,625	16,625	16,625
Home Nursing	29,055	29,055	29,980	29,980	30,905	31,830
Vaccination and Immunisation	1,640	1,665	1,680	1,680	1,680	1,680
Ambulance Service	32,685	33,470	33,470	33,470	33,470	38,570
Prevention of Illness, Care and After care (excluding Mental Health)	5,895	6,175	6,175	6,175	6,175	6,175
Domestic Help	46,020	49,345	49,845	50,345	50,845	54,795
Mental Health	29,705	42,380	51,460	58,340	61,075	61,075
Expenditure under other enactments and on general administration	34,130	34,570	34,570	35,260	35,260	35,950
Expenditure on local health services not reckonable for general grant	4,420	4,420	4,420	4,420	4,420	4,420
Total for Local Authority Health Services	250,965	272,115	284,985	293,055	298,215	312,705

LOCAL HEALTH SERVICES

Part II

List of Premises at 31.3.62

Purpose	Location and Size
Day Nursery:	Park House, Laurel Street. 50 places
Day Nursery	Shaw Street. 50 places
Day Nursery	Merehall Park. 47 places
DAY NURSERY	Roxalina Street. 50 places
CHILD WELFARE CENTRE	Part of Health Department Buildings, Civic Centre.
CHILD WELFARE CENTRE	Combined Health and School Clinic, "The Withins", Withins Lane.
CHILD WELFARE CENTRE	Combined Health and School Clinic, Moss Bank Way, Astley Bridge.
CHILD WELFARE CENTRES	Ten clinics are held weekly in nine Church Halls, some of which are unsatisfactory to various degrees. One clinic is held on alternate Saturday mornings at Lever Edge Lane School (which has proved inadequate).
Training Centre for Mentally Sub-normal Adults	Cotton Street. 70 places.
JUNIOR OCCUPATION CENTRE	Cotton Street. 53 places
Ambulance Station	Blackhorse Street. This building is unsuitable.

LOCAL HEALTH SERVICES Part II Capital Programme

Effect on Revenue Expenditure	+ 6,880	+ 1,285	6,880	+ 2,825
Provisional Cost	Land 4,000 Buildings and Equipment 38,600 TOTAL 42,600	Buildings and Equipment 10,000 TOTAL 10,000	Land 4,000 Buildings and Equipment 38,600 TOTAL 42,600	Land 2,000 Buildings and Equipment 27,600 Total 29,600
Need	New Provision Investigations show there is urgent need for this type of accommodation.	REPLACEMENT This clinic will replace the child welfare clinic which is held on alternate Saturday mornings at a school, and is totally inadequare. It will also allow for an expansion of the health services in the district.	NEW PROVISION Investigations show there is urgent need for this type of accommodation.	REPLACEMENT This clinic will replace sessions held at present in an unsuitable Church Hall, and will allow for an expansion of the health services in the district.
Location and Size	24 places	Lever Edge Lane To serve a population of 9,000.	24 places	Halliwell area. To serve a population of over 12,000.
Schemes (In order of Priority)	Hostel for Mentally Infirm Younger Males	Combined Health and School Clinic	Hostel for Mentally Infirm Younger Females	Combined Health and School
Financial Year	1963/4	1963/4	1964/5	6/8961

LOCAL HEALTH SERVICES Part III - Staff

Approximate whole time equivalent in each case and excluding staff for school health service

1971–2	2/11ths 2823 333 41 41 137 21 3 3 4 4
1966-7	2/11ths 281 = 2 282 = 3 32 = 4 15 15 123 21 21 3 4
1965-6	2/11ths 280 280 280 311 41 41 15 15 18 18 2 4 4
1961–2 In post at at 31.3.62	2/11ths 101 28 ² /3 31 ¹ /2 41 39 (13) 119 115 15
1963-4	2/11ths 273 302 41 302 41 39 (13) 117 117 5
1962–3	2/11ths 24 ± 24 ± 30 ± 41 30 ± 41 13 110 110 5 5
1961–2 In post at 31.3.62	5 211 30 30 38 38 39 (13) 110
Category of Staff	Doctors (including M.O.H.) Domiciliary Midwives Health Visitors Home Nurses Staff (other than domestic) in Day Nurseries Other Nursing Staff in the Health Services Ambulance Staff (Total of all grades). (Number of vehicles in brackets) Staff (other than domestic) in Training Centres for Mentally Subnormal Home Helps (including supervisory staff) Staff (other than domestic) in residential accommodation under Section 21/48 or 28/46 Staff (other than domestic) in non-residential centres for the handicapped under Section 29/48 Domiciliary Social or Welfarc Workers: (a) University or equivalent professional training i.e. (almoners, psychiatric social workers and family case workers) (b) General training in social work (i.e. with certificate of Social Workers Training Council when available) (c) Other social workers (Mental Health)

PART III

CONTROL OF INFECTIOUS DISEASES

Notifiable Infectious Diseases

Tuberculosis

Venereal Disease

NOTIFIABLE INFECTIOUS DISEASES

Incidence:

The following summary gives the number of cases of notifiable infectious diseases, other than tuberculosis, which have been notified or otherwise ascertained.

D	isea	se					Total Cases Notified	No. of Cases after Correction	Ascertained Cases
Anthrax					. •		_	-	_
Diphtheria				1.1			-	-	_
Dysentery							330	331	230
Acute Encephalitis							-	-	-
Enteric Fever (including	ng I	ara	typho	oid)	• •	٠.	2	2	-
Erysipelas						٠.	3	3	-
Malaria							1	1	-
Measles				4 1		٠,	575	576	_
Meningococcal Infection	on	٠.	٠.				_	_	
Ophthalmia Neonatoru	um			٠.			1	1	_
Pneumonia-									
Acute Primary							65	65	_
Acute Influenzal		٠.				٠.	30	30	_
Acute Poliomyelitis-									
T) 1 . *							1	1	_
Non-Paralytic						,	-	_	
Puerperal Pyrexia							2	2	_
							60	59	_
0 11							_	_	_
*****							2	2	_
T							68	66	14
		•							

The following table gives the number of notifications of notifiable diseases, after correction of diagnosis, during each of the last ten years.

Disease	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962
§Anthrax Diphtheria Dysentery Acute Encephalitis Enteric Fever (including Paratyphoid) Erysipelas Malaria Measles Meningococcal Infection Ophthalmia Neonatorum Pneumonia Acute Primary Acute Influenzal Acute Poliomyelitis Paralytic Non-Paralytic Puerperal Pyrexia	263 1 2 222 *1 1308 7 - 94 21	1 615 3 2 34 *1 672 4 2 123 33 1 -2	1 154 3 5 30 *1 2205 1 2 123 20 7 2 5	3 3 145 13 8 6 5	167 2 22 2793 7 4 153 151 4 12 6	187 1 1 2 1 1 1 2 1 3 3 3 4 4 2 7 8	237 - 6 19 1 1797 2 - 103 74 - 3 3	79 4 1 2	229 - 1 10 1 2708 1 - 79 63	331 - 23 1 576 - 1 65 30
Scarlet Fever	246 - 593 54	149 167 66	244 53	94 - 319 1129	73 215	278 - 40 150	262 100 181	186 - 179 59	89 147 57	59 - 2 66

§Notifiable from 1st December, 1960.

^{*}Induced for therapeutic purposes.

Deaths from Infectious Diseases, 1953 - 1962 inclusive:

Disease	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962
Diphtheria	-	-	-	-	-	_	-	-	-	-
Dysentery	-	-	_	2	_	-	_	_	-	-
Diarrhoea and Enteritis										
under 2 years of age	_	1	_	1	_	-	-	1 1	1	1
Acute Encephalitis	_	2	4	_	-	-	-	-	_	-
Enteric Fever (including										
Paratyphoid)	_		_	_	_	-	_	-	_	_
Erysipelas	-	_	_	-	- 1	_	-	-	_	-
Malaria	-	-	_	-	-	_	_	_	-	-
Measles	3	-	1	1	-	-	2	_	_	_
Meningococcal Infection	-	- 1	1	1	_	_	_	_	1	î.
Ophthalmia Neonatorum	_	~	- 1		-	_	-	- 1	_	_
	112	51	69	65	127	92	107	110	114	122
including—										
Acute Primary Pneumonia	36	16	20	16	27	25	12	18	14	23
Acute Influenzal ,,	2	3	3	1	17	2	7	6	31	15
Acute Poliomyelitis	1	-	2	- 1	-	- 1		-	-	_
Puerperal Pyrexia		-	- 1	II - II	-	- 1			-	-
Scarlet Fever	_	-	- /	-	-	-	- 1		-	-
Smallpox	-	-	-	-	_	-	-	-	-	_
Whooping Cough	1	-	-	-	-	-	-	-)	-	-
Food Poisoning	_	-)	2	-	-	_	- 9	-	- 1	-
			1							

Diphtheria:

The last case in the borough occurred in 1955. 1962 is the seventh successive year in which there has not been a case.

Dysentery:

The number of cases notified was 331, an increase on 1961 when 229 cases were notified, but not an unduly large number when compared with earlier years.

Enteric Fever:

Two cases of paratyphoid fever were notified during the year. Both were children in one family and it is likely that the infection was acquired while abroad. There was no spread of infection beyond the original cases.

Malaria:

One case occurred. It is believed that this was contracted abroad.

Measles:

Only 576 cases were notified, a marked reduction on the previous year when 2,708 cases were notified. However, in my report for 1961 I pointed out that 2,297 of these notifications occurred in the first quarter of that year and were really part of an outbreak of measles extending over the winter of 1960 - 1961. Of the 576 cases in 1962 only 97 occurred in the first nine months of the year and 479 in the last quarter.

Notifications have continued to be fairly high in the first few months of 1963. In effect the winter of 1961 - 2 was relatively free from measles but the winter of 1962 - 3 is showing a high incidence, which is in keeping with the usual two-year cycle shown by measles epidemics.

Whooping Cough:

Only two cases were notified. This is an exceptionally low figure and is substantially lower than the previous lowest year, 1958, when 40 cases occurred. Both the children who had whooping cough in 1962 were over the age of one year.

The decline in the incidence of whooping cough is more striking if the numbers in each quarter of 1961 and 1962 are examined:

		1st Quarter	2nd Quarter	3rd Quarter	4TH QUARTER
1961	 	67	56	20	4
1962	 	_	1	_	1

The incidence of whooping cough has fluctuated during the last ten years but on the whole the trend has been downwards. A small incidence in 1962 would be in keeping with this trend, but it would be as well to wait for another year or two before assuming that the unusually low figure in 1962 is a reliable indication of the extent to which the incidence of whooping cough has fallen.

Poliomyelitis:

Only one case of poliomyelitis was notified during the year. This case was paralytic.

Smallpox:

Although there was no smallpox in Bolton in 1962, and indeed for many years, the work of the Health Department was, nevertheless, affected by the occurrence of smallpox in other parts of the country. Beginning at the end of 1961 and extending into 1962, cases occurred in the West Riding of Yorkshire, the Birmingham area, South Wales and London. This led to a very substantial demand for vaccination in Bolton.

Supplies of lymph for vaccination were diverted to areas in which there were cases and contacts to block potential lines of spread, and this resulted in a local shortage of lymph at the time of peak demand. In spite of this, and the fact that mass vaccination was never advocated, the number of vaccinations and revaccinations carried out in Bolton in 1962 was 8,942, compared with 2,060 in 1961. Most of this increase occurred in the first quarter of 1962. The contrast is most marked amongst adults aged 15 years and over, of whom 5,566 were vaccinated in 1962 compared with 535 in 1961. This ten-fold increase was partly accounted for by popular demand for vaccination because of the occurrence of cases in other parts of the country, particularly in the West Riding, and partly by the fact that most European countries required travellers from the United Kingdom to possess valid International Certificates of vaccination against small-pox during the earlier part of the year. This requirement was relaxed before the main holiday season began, but it lasted sufficiently long for many holiday travellers to attend for vaccination.

The completion of International Certificates added to the time required for this purpose, and special arrangements to deal with vaccination against smallpox had to be continued until the end of June.

This outbreak of smallpox brought to notice several controversial matters, among them the need for a more enlightened public attitude towards vaccination and the control of smallpox. It is generally held that strict quarantine and

vaccination of contacts is sufficient to control the spread of the disease, and that mass vaccination is neither necessary nor desirable. Nevertheless, in the presence of smallpox public demand for vaccination is considerable, even in places far removed from the centre of infection, and in the 1962 outbreak this demand tended to be encouraged by the press and even by the radio and television. This led to the situation where the public were demanding mass vaccination, which most Medical Officers of Health believe to be undesirable. On the other hand, as long as supplies of vaccine lymph are available it is difficult to refuse to vaccinate an individual who requests it. There is, however, sound reason for discouraging mass vaccination. During the recent outbreak of smallpox in England and Wales there were twenty-four deaths from smallpox itself, but there were twelve deaths from complications of vaccination arising from about one hundred and fifty known cases of complications. Many of these complications would not have occurred had vaccination been restricted to individuals in contact with cases.

Food Poisoning:

The number of individual cases of food poisoning notified during the year was 66, an increase of nine compared with 1961. In addition, fourteen cases were otherwise ascertained.

There was only one outbreak during the year and this involved only fifteen people who had attended a party at a private house. The origin of this outbreak was not identified.

It is encouraging to note that there were no outbreaks of food poisoning associated with restaurants, canteens or other catering establishments during the year.

General Administration of the Control of Infectious Diseases:

Public health inspectors carried out 476 visits, and health visitors 235 visits, to make enquiries concerning infectious diseases.

The number of pathological specimens sent for examination to the Department of Pathology at the Bolton Royal Infirmary was 5,224. The types of specimens examined, and the results obtained, are shown in the following table:

Type of Specimen	Pathogenic Organism Found	No. of Specimens
Faeces	Sh. Sonnei	851 20 6 1
	Negative results	4,346 5,224
Ear, Throat and Nasal Swabs		12
	Grand Total	5,236

Notices under the Public Health (Infectious Diseases) Regulations, 1953 were served upon eight persons who were proved to be dysentery carriers and who were food handlers. They were required to do no further work in food premises until they were proved to be free from infection. Six persons submitted claims for compensation, and the total amount paid was £65 15s. 9d.

The following table shows the number of persons to whom special attention was directed in view of the fact that their occupation involved a higher risk of infection to others.

	Examina	ations for
Category	Sonne Dysentery	Other Intestinal Infections
FOOD HANDLERS Positive Negative	. 18	2 53
Nursery Staff Positive Negative	. 10 30	- 1
Nursing and Ambulance Staff Positive Negative	4 7	
SCHOOL STAFF Positive Negative	4 21	- 6
HOME HELPS Positive Negative	- 9	- 9
Totals .	163	73

It was not necessary to issue any certificates in accordance with the authority given to the Medical Officer of Health under Ministry of Health Circular 115/48 for the purpose of claiming National Insurance sickness payments. This provision would apply to contacts or carriers of infectious disease who, because of the nature of their employment, were in a position to spread infection. In all such cases in 1962 it was possible to make alternative arrangements.

I would like to thank the staff of the Pathological Laboratory at the Bolton Royal Infirmary for their willing help in examining specimens and assistance in the interpretation of the findings.

TUBERCULOSIS

Dr. John Mitchell, Consultant Physician, has kindly supplied the following information.

Notifications:

AGE AND SEX DISTRIBUTION OF NOTIFIED CASES:

Respiratory Tuberculosis

Age Periods	0-	1-	2-	5-	10-	15-	20-	25-	35-	45-	55-	65-	75-	Total (ail ages)
Males Females	-	- -	- -	-	1 -	4 5	6	6 5	3 3	4 2	6 2	5 -	1	36 21
Totals	-	-	-	-	1	9	9	11	6	6	8	5	2	57

Non-Respiratory Tuberculosis

Age Periods	0-	1-	2-	5-	10-	15-	20-	25-	35-	45–	55-	65-	75-	Total (all ages)
Males Females	_ _	_ _	-		_	_ 1	=	1 -	1 -	_ _	_	-	=	2 3
TOTALS	-	-	-	2	-	1	-	1	1	-	-	_	-	5

The number of cases on the tuberculosis register at the end of the year was 552

Deaths:

Respiratory Tuberculosis

Age Periods	0-	1-	2-	5-	10-	15-	20-	25-	35-	45-	55-	65–	75–	Total (all ages)
Males Females	_	-	-	-	-	-	-	-	1	_	1	5	_	7
TOTALS									1	_	1	5		7
TOTALS									1					

Non-Respiratory Tuberculosis

Nil

There was one male non-pulmonary notification after death.

Summary of the Work of the Chest Clinic:

	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962
No. of new cases notified	127 47								60 10		62 8
new cases No. of cases referred from Mass Miniature Radiography	1,454	1,144	1,127	1,217	1,624	1,722	1,682	1,395	1,223	1,082	1,126
Units	148										176
B.C.G. Vaccinations Total attendances at	52	89	94	84	125	96	129	151	179	129	121
clinic No. of contacts	6,298	6,745	7,354	6,901	6,510	5,674	5,078	4,328	3,679	3,302	3,404
examined	580	438	401	463	749	689	866	606	608	447	416

Of the 416 contacts examined, 6 had active pulmonary tuberculosis.

General Comment:

There were 62 new cases of tuberculosis notified during 1962 - 20 less than last year.

Eight patients died of tuberculosis during the year. This is the lowest figure ever recorded in Bolton.

There are now only 14 patients (12 males and 2 females) with persistently positive sputa. Of these, 10 have acquired resistant organisms.

During the year, 121 B.C.G. vaccinations were carried out at the Chest Clinic.

Care and After-Care of Patients suffering from Tuberculosis:

This duty was again carried out in co-operation with the Chest Clinic staff, partly in the course of clinic sessions and partly through the meetings of the After-Care Panel consisting of a medical officer from the Chest Clinic, two from the Health Department, health visitors, and a representative of the Housing Department.

Six meetings of the After-Care Panel were held during the year. Cases were discussed on first notification, again when discharged from hospital and as need arose. One hundred and twenty-six new cases were discussed and many other cases investigated as required, appropriate help being given. Nine cases were recommended for rehousing.

Some cases not qualifying for National Assistance, and yet having a genuine need, were referred to voluntary bodies such as the Women's Voluntary Service, British Red Cross Society or British Legion.

The Home Nursing Service undertook the carc of 78 patients in their homes, most of them requiring streptomycin injections daily. Many others, including those who had returned to work, attended the Health Department for their injections in the evenings.

The Home Help Service assisted 11 patients.

Sick room equipment was loaned free of charge.

Three children were admitted to the Elizabeth Ashmore Residential Nursery to facilitate the mother's entering sanatorium for treatment. Where the children who have been in contact are already infected, treatment may be given in hospital or at home as appropriate.

There is one full-time health visitor who paid 814 visits to patients' homes during the year. In addition, there is one part-time clinic nurse undertaking six sessions a week.

Close contact was maintained between the Disablement Rehabilitation Officer and the Chest Physician for rehabilitating patients in suitable work.

B.C.G. Vaccination:

In this connection 208 skin tests were performed in the Chest Clinic and 121 vaccinations were performed mostly in babies and children.

Contacts:

As tuberculosis is becoming less common, it becomes even more important to examine contacts, both to trace the source of the infection and to discover new cases. The evening contact clinic was continued and during the year 416 examinations were made jointly by the Medical Officer of Health's staff and the Chest Physician.

The number of contacts found to be requiring treatment or close observation was 6, or 1.44%.

Following the Ministry of Health circular of 18.2.60 recommending observation of school leavers found to have strongly positive skin tests, the weekly session was continued. As these tests indicate an infection which may be recent and perhaps likely to develop, these children were examined and X-rayed and where possible, their close contacts also.

One case was found requiring treatment but most of them were very well. Some were known contacts of known cases. Most will be reviewed annually for two or three years until the value of this follow-up has been determined in the light of experience.

During 1961 two active cases of tuberculosis were discovered in a school in Bolton. One of these children lived in the County area and the other in Bolton. Six other cases were found on survey by X-ray also to require treatment. Three of them lived in the County area, and three in Bolton. One of the first cases was apparently the "index" case. Further survey in 1962 has not revealed any further cases.

B.C.G. Vaccination of School Children and Students:

B.C.G. vaccination was offered to children in school who were twelve years old or older. The Heaf Gun multiple puncture method was used for skin testing. Freeze-dried vaccine was used for the vaccination. The total number of consents received was 1,696 of which 1,527 were skin tested. There were 169 absent, and 64 absent for the reading of the skin test. Of the 1,527 tested, 1,219 were negative and these were vaccinated. Two hundred and forty-four were positive and of these, 91 were strongly positive. The latter attended the Chest Clinic for X-ray and to be kept under observation.

Analysis of Positive Reactors by Age Groups

Age Group	Total Number of children	Number Positive	% Positive		
12 years	5 942 450 51 13 2	1 146 88 8 1	20·00 15·49 19·55 15·68 7·60		
TOTALS	1,463	244	16.67		

STUDENTS:

As in previous years B.C.G. vaccination was offered to students attending further education courses. The response was very poor and only 6 students consented to vaccination. Of these six, 5 were positive to the skin test and one negative. The latter was vaccinated.

Mass Miniature Radiography Survey in Bolton:

I am indebted to Mr. N. Hall, the Organising Secretary of the No. 4 Mass Miniature Radiography Unit, for sending me the results of the survey, which are shown in the following tables.

Examinations carried out in Bolton during 1962

		MALE	FEMALE	BOTH SEXES
General Practitioner Referrals			254	536
General Public Volunteers Factories/Offices			2,704 2,603	4,984 6,546
Others			2,003	
Totals	 	 6,505	5,561	12,066

The numbers compared with previous years are:

General Public Factories and Firms Others, including those	1948 2,296 22,748	1955 14,640 29,830	1959 10,624 10,905	1960 6,672 3,631	1961 5,282 1,405	1962 4,984 6,546
referred by general practitioners	2,280	6,060	938	487	4,900	536
TOTALS	27,324	50,530	22,467	10,790	11,587	12,066

Significant Abnormalities (Distribution by Age and Sex)

Total	Rate per 1000	.83	3.15	1.49					
Grand Total	Cases	10	38	18	3	4	1	38	2
	Rate per 1000	1.63	3.09	.54					
	Total	6	17	3	2	3	1	17	F
	65 & over		3	1	-			7	
	15-20-25-35-45-55-60- 19 24 34 44 54 59 64			2				4	
iles	55-		-		-			-	1
Females	45- 54		4					2	
	35-44		4					2	
	34	-	7			-		1	
	242	+	C1			-			
	-21 19	_ w				1	1	i	
	41								
	Under 14								
	Rate per 1000	.15	3.20	2.29					
	Total	-	21	15	1	-		21	7
	65 & over		6	9				ū	-
1	62		4	10				9	-
S	55- 59		7	12				7	
Males	45-		т	2	-	-			
~	35-		9					7	
	15-20-25-35-45-55-60- 19 24 34 44 54 59 64		<u>е</u>	<u> </u>				-	
	20-								
	14								
	Under 14								
	Abnormalities	Tuberculosis requiring close clinic supervision or treatment.	Tuberculosis requiring only occasional outpatient supervision	Malignant Neoplasms.	Non-Malignant Neoplasms.	Sarcoids (including en- larged Hilar Glands).	Congenital Cardiac abnormalities and abnormalities of the Vascular System.	Acquired Cardiac abnormalities and abnormalities of the Vascular System.	Pneumoconiosis

Respiratory Tuberculosis Requiring Treatment (Distribution by type of Examinee, Age and Sex)

	Both Sexes	3	ıc.	7	2
	Under 15 20 25 35 45 55 60 65 & Both 14 19 24 34 44 54 59 64 over Total Sexes	CI	ĸ	7	6
	65 & over				
	82				
	55-				
Females	545				
I'en	- 4 + 4 4 1 4 1	[
	4 25				
	250 1 5 50			CI	3 4
	21 		(1)		
					11
	Total	-			-
	15 20 25 35 45 55 60 65 & 14 19 24 34 44 54 59 64 over				
	94				
	9 - 6				
	5-5				
Males	-5.4 -4.1				
	34	-			1
	20-				
	15-				
	41				
	Under 14				
		:	:	:	:
		:	:	:	
	nee	rals	:	:	:
	kami	lefer	teers	:	Totals:
	of E	ner ŀ	olun	:	Tor
	Type of Examinee	titio	ic Ve	ices	
	T	Prac	Publ	3/Off	
		General Practitioner Referrals	General Public Volunteers	Factories/Offices	
		Gen	Gen	Fact	

Malignant Neoplasms

(Distribution by type of Examinee, Age and Sex)

Females 15-20-25-35-45-56-60-65 & Grand 14 19 24 34 44 54 59 64 over Total Total Total	2 3
00-65 & 64 over 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	C1
55	
Females 135-145-145-145-145-145-145-145-145-145-14	
Fem 44	
3455	1
7 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
22	ļ
	1
Total 2 2 10 10 3	15
Males Under 15-20-25-35-45-55-60-65 & 14 19 24 34 44 54 59 64 over	9
60 4 4 1	v
55 1 1	C1
es - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	2
Males 44 5 44 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
342	
270	
61 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	<u> </u>
4	
Under 14	
	:
: secre	:
Type of Examinee al Practitioner errals	:
Exa Exa	S
racti	Totals
Typ	To
Type of Examinee General Practitioner Referrals General Public Volunteers	

Mass Miniature Radiography Surveys

	N	o. of Pers			Active		Malignant		
	Males	Examine Females		Males	Tuberculo Females			Neoplasms Females	[Cotal
1948/49 School children	15,339 1,318	11,985 962	27,324 2,280	32	17	49 2	8	2	10
Excluding school children	14,021	11,023	25,044	31	16	47	8	2	10
Rate per 1,000 examined excluding school children				2.21	1.54	1.88	.57	.18	.40
1952 School children	16,294 684	12,437 666	28,731 1,350	27 -	16 -	43	10	6 -	16
Excluding school children	15,610	11,771	27,381	27	16	43	10	6	16
Rate per 1,000 examined excluding school children				1.79	1.36	1.57	.64	.51	.58
1955 School children	25,670 2,360		50,530 4,570		38	66 1	19 -	4 -	23
Excluding school children	23,310	22,650	45,960	27	38	65	19	4	23
Rate per 1,000 examined excluding school children				1.16	1.68	1.41	.86	.17	.50
1959 Rate per 1,000 examined	11,781	10,686	22,467	13 1.1	14	27 1.20	12 1.01	5 .46	17 .76
1960 Rate per 1,000 examined	5,640	5,150	10,790	7 1.24	.39	.83	9 1.60	1 1.19	10 .93
1961 Rate per 1,000 examined	6,530	5,057	11,587	15 2.30	10 1.98	25 2.16	9 1.39	.39	.92
1962 Rate per 1,000 examined	6,559	5,507	12,066	.15	9 1.63	.83	15 2.29	3 .54	18 1.49

In May the No. 4 Mass Miniature Radiography Unit was fitted with 100 mm. X-ray apparatus, and the work done in Bolton between 21st August and 29th October was carried out with this equipment.

The total number of examinations carried out in Bolton during 1962 was 12,066. This is too small to be representative of the total population but the results are, nevertheless, interesting and important.

There were ten cases of tuberculosis requiring close clinical supervision or treatment. This is an improvement on the previous year when there were twenty-five such cases. On the other hand, there were thirty-eight cases of tuberculosis requiring only occasional out-patient supervision in 1962, compared with only eighteen in 1961. The total number of cases of tuberculosis discovered is therefore very similar, although the number of cases sufficiently advanced to require treatment has certainly fallen.

The number of cases of lung cancer discovered by mass miniature radiography has shown an increase. Eighteen cases were discovered in 1962, compared with 11 in 1961. Of these eighteen, fifteen were in males and eleven of these were in men over the age of sixty.

Expressed as a rate, there were 2.29 cases of lung cancer per thousand men examined in 1962. This is the highest rate in any year so far, and it is perhaps interesting to compare it with ten years ago in 1952 when the rate was only 0.64 per thousand. This finding is in keeping with the substantial increase in deaths from lung cancer among males in Bolton which has been mentioned in another part of the report, and leaves no doubt about the increasing incidence of lung cancer.

VENEREAL DISEASE

Dr. Philip S. Silver has supplied the following information which relates to Bolton residents only in attendance at his clinic.

The number of new cases of syphilis attending the clinic from the Bolton area was 16 which is an increase of 2 over the previous year. Two of these cases were early syphilis in the contagious stage. There were no contacts with these particular cases in the Bolton area.

The number of cases of gonorrhoea from Bolton was 72 compared with 123 last year and whilst this shows a marked decrease, the number of cases of gonorrhoea under the age of 19 was 17 compared with 16 in the same age group in the previous year.

The number of new non-venereal cases was 349, virtually the same as last year.

It would appear, therefore, that there has been a satisfactory decline in the number of cases of gonorrhoea although the incidence in the teenage group remains about the same. The complete lack of knowledge about venereal disease and the damage that it may cause is still very apparent and this suggests that further publicity is necessary.

There were 58 cases referred by the Moral Welfare Worker and 15 from the ante-natal clinic. The clinic staff carried out 45 domiciliary visits for the purpose of ascertaining the cause of non-attendance.

The following table summarises the situation for the past twelve years:

	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962
Syphilis	44	58	48	36	43	23	22	19	19	10	14	16
Gonorrhoea	80	64	50	60	75	58	55	57	58	74	123	72
Non-Venereal Disease	405	334	316	333	237	286	256	214	265	320	348	349
Totals:	529	456	414	429	355	367	333	290	342	404	485	437

PART IV

ENVIRONMENTAL HYGIENE

Work of the Public Health Inspector

Housing and Slum Clearance

Clean Air

Inspection and Supervision of Food

General Sanitation

Disinfection and Disinfestation

Report of the Borough Analyst

WORK OF THE CHIEF PUBLIC HEALTH INSPECTOR

The past year has been noteworthy for the continued progress made in the fields of smoke control, slum clearance and food hygiene. Routine duties under the many statutory enactments have also been carried out despite the pressure of specialised work.

The highlights of the year might be said to be the new method used for the bacteriological examination of glasses in public houses and restaurants. This is described on page 134. The close co-operation between the Bolton Pathological Department (Director, Dr. G. B. Manning) and the Health Department has enabled bacteriological examinations to be carried out on instruments and equipment used in hairdressing and butchering establishments. The fullest co-operation has been received from the owners of the various businesses visited for the purpose of carrying out these special investigations, which have been the subject of favourable comment on television and in the national press.

Staff:

In September, 1962 there were three vacancies for district public health inspectors.

Advertisements to fill the vacancies at the special scale brought no response, and the Corporation amended the establishment from ten to fourteen specialist inspectors and from ten to six district public health inspectors. Also the number of pupil inspectors on the establishment was increased from four to six.

Subsequently, two appointments were made, viz. (a) a specialist inspector, and (b) a pupil inspector; both men will commence duty early 1963. Also three of the district inspectors were promoted to specialist posts.

The staffing position at the 31st December, 1962, was as follows:

Chief Public Health Inspector
Deputy Chief Public Health Inspector

- 13 Specialist Public Health Inspectors (1 vacancy)
- 4 District Public Health Inspectors (1 vacancy)
- 1 Authorised Meat Inspector
- 4 Pupil Public Health Inspectors (2 vacancies)

SCHOOL HILL DISINFECTING STATION

Foreman

5 Rodent Operatives

During the year two pupil public health inspectors passed their qualifying examinations and were duly appointed district inspectors; one pupil has since obtained his certificate as an inspector of meat and other foods. Three pupil public health inspectors were appointed during the year.

Work Done:

The details of complaints received from the public; types of premises subject to routine inspection—with or without complaint; a summary of visits and inspections for the purpose of detecting sanitary defects; details of notices served, a summary of legal proceedings taken to secure repair of properties and details of sanitary improvements effected are given in Tables 1 to 13 on pages 147 to 155.

Clean Air - Industrial Smoke:

The steady progress made in recent years in abating industrial smoke has continued and there have been many installations of improved mechanical stokers or change-overs to oil-firing. Three large scale improvements call for special mention. The furnaces at Ryder's in Bark Street, which have given rise to so much nuisance in the past, have now been replaced by an electric induction furnace with a flue gas washer and an electrostatic precipitator. This new plant is believed to be of the most up-to-date and efficient pattern of any in the country for a foundry of comparable size.

Another foundry has been rebuilt, and re-equipped with oil-fired furnaces, the flue gases being taken to a modern high efficiency multi-bag filter installation. A new boiler house equipped with three large high-efficiency oil-fired boilers has replaced a plant which previously gave the department a great deal of trouble.

In one case legal proceedings were taken against a firm for contravening the Clean Air Act provisions regarding the emitting of dark smoke.

Smoke Control Areas:

At the present time 1,237 acres of the town are covered by confirmed Smoke Control Orders covering nearly 10,000 premises of various kinds of which nearly 9,000 are dwelling houses.

During the year the Health Committee assisted over 1,100 private house-holders to carry out firegrate alterations to comply with Smoke Control Orders, the grants amounting to over £14,000. Fifty-six persons in financial difficulties were given grants covering the whole of the cost of the installations.

A number of complaints have been made in the press during the year alleging that smokeless fuels give off harmful fumes during burning. So long as approved appliances properly installed are used there should be no fumes, but the department is always ready to advise in cases of difficulty.

Food:

The careful watch on our food maintained by the department's inspectors continued during 1962.

A prosecution for being in possession of meat unfit for human consumption resulted in its owner being fined £40. Prosecutions were taken in 12 other cases for food contaminated in various ways or found to contain foreign bodies. A close watch continues to be kept upon the circumstances under which food is stored and prepared and although the department always tries first to bring about improvements by persuasion, prosecutions are instituted where this fails; court action was taken in 5 cases, resulting, in two instances, in fines of £60 and £102 respectively.

New Abattoir:

Tenders are to be invited during the next year for the construction of a new abattoir at an estimated cost of f, 200,000.

Work associated with plans and specifications is already in hand.

HOUSING AND SLUM CLEARANCE

Clearance Areas and Compulsory Purchase Orders:

During the year demolition of properties in the Bolton (Bradford Ward Nos. 2 - 9) Compulsory Purchase Orders, 1959—Moncrieffe Street area—was completed, with the exception of a few Bridgeman Street properties which are being left standing for the time being. Demolition of properties in the Bolton (Derby Ward Nos. 5 and 6) Compulsory Purchase Orders, 1960—Kirk Street and Shuttle Street areas—was completed.

Many of the properties in the Bolton (Derby Ward Nos. 2 and 4) Compulsory Purchase Orders, 1960, and the Bolton Derby Ward No. 7 Compulsory Purchase Order 1961—Lupton Street, Kirk Street and Gate Street areas—were demolished. No demolitions have yet been carried out in the Derby Ward Nos. 1, 3 and 8 areas—Partridge Street, Moor Lane and Deane Road.

Housing and other property inspections were completed in the Egyptian Street and Noble Street Clearance Areas and classifications in respect of unfitness were made.

EGYPTIAN STREET CLEARANCE AREA

Four hundred and sixty-eight dwellings and eleven other properties were formally represented to the Health Committee on the 18th April, 1962. Subsequently four hundred and twenty-three unfit dwellings, forty-five other dwellings and eleven other buildings were included in the Bolton (West Ward Nos. 2 - 9 Clearance Areas) Compulsory Purchase Order, 1962—Egyptian Street Clearance Area) made by the Council on the 7th August, 1962. 1,245 persons from these areas will require rehousing.

Objections were made against the inclusion of twenty-two properties within the Clearance Areas. In sixteen of these objections, representations were made to the Minister that the premises had been well maintained. In addition similar representations that the houses had been well maintained were made in respect of a further forty-seven premises. A Public Inquiry was held on the 11th December, 1962, and the result is awaited.

NOBLE STREET CLEARANCE AREA

One hundred and ninety-four dwellings and seven other properties were formally represented to the Health Committee on the 12th December, 1962. Subsequently one hundred and eighty-five unfit dwellings, nine other dwellings and seven other buildings were included in the Bolton (Derby Ward Nos. 9 - 11 Clearance Areas) Compulsory Purchase Order, 1963—(Noble Street Clearance Area). 453 persons from these areas will require rehousing.

Since the beginning of the Council's Slum Clearance Programmes (November 1955) 1,881 houses have been demolished in Clearance Orders or Compulsory Purchase Orders, and as Individual Unfit Houses. One thousand, six hundred and forty-three families have been rehoused.

Many housing inspections have been carried out on properties which are not at present included in the Council's published slum clearance programme to make preliminary classifications as to unfitness under the Housing Act, 1957.

Housing inspections were made on properties in the Darley Street, Prosperous Street and Mount Street areas in connection with the Arden Street Clearance Area and in consequence minor amendments have been made by the Council to the slum clearance programme.

The Minister of Housing and Local Government is asking local authorities to expedite their slum clearance programme. The Council have reviewed the matter and it is now intended to overtake arrears in the earlier programme.

The Council's rearranged slum clearance programme is as follows:

REPRESENTATION CALENDAR YEAR	Area	DWELLINGS TO BE DEMOLISHED
1963	Arden Street	246
	Ainscow Street	273
	Blackhorse Street	39
1964	Belgrave Street	468
	Deane Road (from 1st 5 year programme)	
1965	Boundary Street	142
	Plato Street	68
	Southern Street	57
	Howard Street	228
	Cooper Street	178
1966	Pitt Street	41
	Rivington Street	43
	Horrocks Street	54
	Fylde Street	110*
	Princess Street	5
	Heywood Street	49
	Radcliffe Road	9
	Rothwell Street	24

*65 of these houses will be affected by the Farnworth By-pass Scheme and the occupiers may need rehousing in 1964.

The College of Technology Scheme will involve the demolition in 1963/4 of 135 houses in the Derby Street—Deane Road area.

Within the Clearance Areas there is the problem of nuisance from unoccupied dwellings and other vacant buildings, which are often found to be in a very unsatisfactory condition. Efforts are made, particularly in cases where formal action has been taken to close a house, to secure such premises by bricking up or boarding up the windows and doors to prevent access by unauthorised persons. These efforts are not always successful and the necessary work is not legally enforceable. Even where the house or other building is sealed the yard is often used for tipping of rubbish. Arrangements are made with the Cleansing Department to remove accumulation from such premises where necessary.

Enquiries from Purchasers of Houses:

Numerous enquiries at the Health Department continue to be made by interested persons. The inspectors gave information on the existing slum

clearance programme to 1,410 enquirers during the year. 2,487 enquiries regarding land charges were received from potential purchasers of properties within the borough.

Improvement and Standard Grants:

The following information has been kindly supplied by the Borough Engineer in respect of the year 1962:

No. of applications received		 	 	 501
No. of applications approved by Counci	1	 	 	 461
No. of applications refused		 	 	 _
No. of applications cancelled		 	 	 3

The Borough Engineer states that in all cases applicants are interviewed and where possible inspections are carried out so that advice can be given prior to the application being made, so as to avoid the necessity for the refusal of applications. In addition the Borough Engineer requests the advice of the Health Department in all cases as to whether or not the houses concerned are likely to have a life of not less than fifteen years. Such information is, of course, merely in the nature of a provisional estimate based on the Chief Public Health Inspector's appreciation of the situation, as the Corporation's approved programme of slum clearance does not extend beyond the year 1966.

Certificates of Disrepair - Rent Act, 1957:

In view of the complexity of the procedure for the issue of various certificates under the Rent Act, 1957, all applications for certificates have continued to be dealt with by the Insanitary Areas and Premises Sub-Committee. No appeals to the Courts have been made against any of the Sub-Committee's decisions since the Act came into force.

The following table gives details of the types and numbers of certificates applied for, and the action taken by the Sub-Committee.

APPLICATIONS FOR CERTIFICATES OF DISREPAIR:

APPLICATIONS FOR CERTIFICATES OF DISREPAIR:	
Number of applications for certificates	16
Number of decisions not to issue certificates	2
Number of decisions to issue certificates:	
(a) In respect of some but not all defects 8	
(b) In respect of all defects 2	10
	10
Number of undertakings given by landlords under paragraph 5 of	4
the First Schedule	4
Number of undertakings refused by Local Authority under proviso to paragraph 5 of the First Schedule	
Number of certificates issued	10
Number of certificates issued	10
Applications for Certificates as to the Remedying of Defects:	
Number of applications by tenants 3	
Number of applications by landlords	
Number of certificates issued	3

AF	PPLICATIONS FOR CANCELLATION OF CERTIFICATES:	
	Applications by landlords to Local Authority for cancellation of	
	Certificates	7 4
	Decisions by Local Authority to cancel despite tenants' objections	2
	Certificates cancelled by Local Authority	5
ST	TATEMENT OF ACTION TAKEN UNDER RENT ACT, 1957 SINCE 6TH JULY, UP TO PRESENT DATE	1957
	Number of applications for Certificates of Disrepair	546
	Number of undertakings given by landlords	192 347
	Number of Certificates of Disrepair cancelled by Local Authority	70
	·	
H	ousing Statistics:	
Н	DUSES NOT INCLUDED IN CLEARANCE AREAS:	
	Action was taken under the appropriate enactments as follows:	
	Mary Agreem	
	NEW ACTION:	
	Houses represented under Section 16 of the Housing Act,	95
	1957	30
	Closing Orders made	33
	Undertakings not to re-let for human habitation	-
	COMPLETED ACTION:	
	Houses demolished	50
	Persons rehoused	100
	Houses closed (including 168 awaiting sealing up)	204 82
	Persons rehoused	60
H	ousing Inspections:	
	Inspection of Dwelling-Houses	
1.	Dwelling-houses inspected for housing defects (under Public	
	Health Act or Housing Acts)	1,878
	Inspections made for the purpose	7,775
2.	Dwelling-houses (included under sub-head (1) above) which were	
	inspected under the Housing Consolidated Regulations, 1925,	
	as amended by the Housing Consolidated Amendment Regula-	119
	tions, 1932	119
	- The particular of the partic	
	Repairs – Informal Action	
U	nfit or defective houses rendered fit as a result of informal action by	100
	the Local Authority under the Public Health Act or Housing Acts	190

ACTION UNDER STATUTORY POWERS

TOBLIC TIEMETH TICH, 1900.					
Houses in which defects were remedied after services.	vice of	form	al not	ices:	
By owners					164
By Local Authority in default of owners					3

Housing Act, 1957

PUBLIC HEALTH ACT 1936.

No action was taken under sections 9 or 10.

CLEAN AIR

Measurement and Investigation

The nine volumetric air sampling units established in 1957 were maintained during the year. The reduction in smoke concentration which has been evident for some years was continued with a reduction of 19% during 1962 as compared with the previous year. The SO_2 content has remained almost constant for the two years.

Industrial Furnaces

PRIOR APPROVAL, CLEAN AIR ACT, 1956, SECTION 3 (2)

Eighteen applications for approval of proposed furnace installations were dealt with under this section.

In each case approval was given either to the proposal as originally submitted or as modified after consultation with the Chief Public Health Inspector.

NOTIFICATION, CLEAN AIR ACT, 1956, SECTION 3 (3)

In addition to the eighteen cases mentioned above, there were fourteen schemes notified under this section.

Improvement and Replacement of Furnaces

The main improvements at existing furnaces and boiler plants during 1962 were as follows:

The installation of four coking stokers to two Lancashire boilers.

The installation of one coking stoker to a Cornish boiler.

The installation of one underfeed stoker to a Lancashire boiler.

The installation of two 3 pass economic boilers, oil fired with full automatic control to replace two Lancashire boilers with inefficient mechanical stokers.

The installation of one 3 pass economic boiler with full automatic control to replace one Lancashire boiler hand fired.

Oil firing equipment with full automatic control to two Lancashire boilers to replace inefficient mechanical stokers.

Oil firing equipment to a Hoffmann type brick kiln.

An electric induction furnace with electro-static wet dust arrester.

A multi-bag fabric filter to deal with the exit gases of two oil fired brass furnaces.

A modern incinerator with oil fired fume after-burner, and the installation of an extract ventilation system to deal with the fumes resulting from an industrial process.

It is noteworthy that a new foundry established adjacent to residential property in the Borough and which became fully operative late in 1961, has now been in use for over a year without giving rise to nuisance of any kind.

Smoke Control Areas

The following shows the position regarding smoke control areas at 31st December, 1962:

Table of Smoke Control Areas under Bolton Corporation Act, 1949, and Clean Air Act, 1956

	Order Confirmed	OPERATIVE
TOWN CENTRE SMOKELESS ZONE Acreage Houses Factories Commercial Premises Miscellaneous 88	3.4.54	1.11.54
EAST WARD SMOKE CONTROL AREA Acreage	14.11.57	1.6.58
CROOK STREET SMOKE CONTROL ARFA 2.1 Acreage 2.1 Houses (All Corporation) 81	29.4.58	1.11.58
QUEENS PARK SMOKE CONTROL AREA Acreage	22.7.60	1.5.61
SCHOOL HILL SMOKE CONTROL AREA	19.1.60	1.8.60
BEVERLEY ROAD SMOKE CONTROL AREA	19.1.60	1.8.60
DEANE SMOKE CONTROL AREA Acreage	15.5.61	1.5.62
Breightmet Estate Extension Smoke Control Area Acreage 68.88 Houses (All Corporation)	15.5.61	1.5.62

CRUMPSALL STREET ESTATE EXTENSION SMOKE CONTROL AREA	15.5,61	1.5.62
LEONARD STREET ESTATE EXTENSION SMOKE CONTROL AREA	15.5.61	1.5.62
Lever Edge Lane Estate Extension Smoke Control Area Acreage 1.21 Houses (All Corporation) 20	15.5.61	1.5.62
GREENLAND ROAD SMOKE CONTROL AREA	15.5.61	1.5.62
RADCLIFFE ROAD SMOKE CONTROL AREA	15.5.61	1.5.62
Ashworth Lane Smoke Control Area	15.5.61	1.5.62
Moss Farm Estate Smoke Control Area	reed in principle 12.8.60	
HULTON SMOKE CONTROL AREA	28.12.61	1.10.62
RUMWORTH SMOKE CONTROL AREA	28.12.61	1.10.62
Lever Edge Lane (South) Smoke Control Area Acreage 102.8 Houses 628	28.12.61	1.10.62
HEATON SMOKE CONTROL AREA	21.5.62	1.7.63
Houses	der made by Cot —awaiting confir gested date o 1.10.63	rmation— of operation

The following eleven Smoke Control Orders became operative during the year under review. The first eight areas namely:

Deane
Extension of Breightmet Neighbourhood Unit
Extension of Crumpsall Street Estate
Extension of Leonard Street Estate
Extension of Lever Edge Lane Estate
Greenland Road
Radcliffe Road
Ashworth Lane

were confirmed in May, 1961, and became operative on the 1st May, 1962.

The latter three areas:

Hulton Rumworth Lever Edge Lane (South)

were confirmed on the 28th December, 1961 and became operative on the 1st October, 1962.

The Heaton Smoke Control Order, covering the largest area and with a greater number of properties than any previous Smoke Control Area, was made by the Council in November, 1961. This Order was confirmed by the Minister of Housing and Local Government on the 21st May, 1962, without any objection being received and, therefore, without the need for a Public Inquiry; the date for the coming into operation, however, was altered from the 1st May, 1963 to the 1st July, 1963.

In all the above cases the usual practice of the department was followed immediately after confirmation of the Order. The occupiers of all premises in the area were informed by circular of the effect of the Order, and where appropriate, the necessary application forms for financial assistance towards the cost of conversion of fireplaces were included. Visits were made by inspectors to persons requesting assistance, and advice given to help the change-over to smokeless fuel take place with the least inconvenience.

Shortly before any Smoke Control Order becomes operative the occupiers of all premises within the area are again informed of the effect of the Order; the conditions governing payment of grants when work is carried out after the operative date being particularly stressed.

In cases where the necessary work has not been carried out before the operative date, statutory notices are served in order that the grant is not forfeited.

A further Smoke Control Order was made on the 5th December, 1962, covering an area bounded by Ivy Road, Church Road, Captains Clough Road, Moss Bank Way, Old Kiln Lane, Markland Hill Lane, Whitecroft Road and Chorley Old Road. This was designated the Markland Hill and Ivy Road Smoke Control Area. This adjoins and complements the Heaton Smoke Control Area. The Order is awaiting confirmation, the suggested date of operation being the 1st October, 1963.

Towards the end of the year survey work was commenced on an area bounded by Church Road, Captains Clough Road, Moss Bank Way, Halliwell Road, Eskrick Street and Elgin Street, this area being designated the Halliwell Smithills Smoke Control Area, and is again contiguous to the previous area.

Survey work in this area is being carried out in accordance with the Ministry of Housing and Local Government Circular 3/62, which allows estimates to be produced both for fuel requirements and cost of conversions by a "sample survey" of a percentage of houses of similar type to produce an average estimate.

This area is the first where this procedure has been possible from the start of the survey, although it was used for the completion of the Markland Hill and Ivy Road Smoke Control Area survey, the estimated costs showing little variation from those produced by house to house visiting.

The same circular lays down new principles to be observed in connection with the granting of financial assistance towards the cost of smokeless ignition. It advises that a "ceiling" of £12 should be placed on this cost, and to allow exemptions to permit the use of sticks and paper if this amount would be exceeded. This condition has been written into the Markland Hill and Ivy Road Smoke Control Order.

Prior to the commencement of survey of any proposed Smoke Control Area, all householders are circularised. They are provided with pamphlets supplied by the Ministry of Housing and Local Government, the Solid Smokeless Fuels Federation, the Women's Advisory Council on Solid Fuel, the Electricity Industry, the Gas Industry, and the National Society for Clean Air. A circular produced by the department showing the Council's proposals concerning Smoke Control Areas and explaining the need for such a programme is also sent out. A display of static material was again produced and exhibited in the foyer of the Central Library, and posters were displayed in the Corporation buses and at various vantage points in the areas. The Mobile Exhibition of the Solid Smokeless Fuels Federation paid two visits of a week's duration each during the year. The vehicle was stationed at various points within the proposed areas for half day periods, the occupiers of property in the area being informed by circular of the times and places. It is pleasing to report that the exhibition was well attended, people showing great interest in the appliances and fuels displayed. Every effort is made by the department to ensure that the people affected appreciate the effect of the Order and their rights under the Clean Air Act.

During the year both new and existing Areas were kept under surveillance for contraventions. Thirty-six were observed, verbal and/or written warnings being issued by the inspector.

During the year the Minister requested Local Authorities to reconsider their Smoke Control programmes with a view to accelerating progress. The Health Committee accordingly re-considered the Council's existing programme and felt that having regard to the simplified method of survey now permitted, the programme could be expected to be completed by 1970 instead of by 1971.

In October, 1962, a special meeting was arranged in the Albert Hall, Bolton, by the North Western Divisional Council of the National Society for Clean Air. The meeting was addressed by Mr. P. D. Coates, the Senior Officer at the Ministry of Housing and Local Government, dealing with Smoke Control Areas. Although members of the public were admitted and members of numerous local organisations invited, the meeting was essentially for local authorities' elected representatives and officers. After addressing the audience Mr. Coates answered questions submitted by members of the audience. There was a good response to the invitations and well over 400 people attended.

The increasing popularity of gas and electric appliances referred to in previous reports has continued. It is clear that Smoke Control is now beginning to have an appreciable effect on the pattern of domestic heating, and during the year the first applications were received in respect of oil-fired central heating

plants, while enquiries have been made in respect of such appliances as block storage heaters, etc.

The following table gives details of action taken in the implementation of confirmed Smoke Control Orders.

SMOKE CONTROL PROGRAMME (1.1.62 to 31.12.62)

Applications:
No. of houses in respect of which applications for approval of proposed works were submitted
Estimated expenditure liable for grant £35,952
Amount of grant payable by Corporation (seven-tenths) £25,166
Claims:
No. of houses in respect of which claims for payment of grants were received
Total amount paid by way of grant $\dots \dots \dots$
No. of 100% grants paid
Amount paid in 100% grants £1,245 8 5
Additional cost of 100% grants £373 12 7
INSPECTION AND SUPERVISION OF FOOD
Milk
MILK AND DAIRIES (GENERAL) REGULATIONS, 1959:
No. of Dairies
No. of Milk Distributors (including retail shops and dairy roundsmen) 533
No. of Dairy Vehicles
MILK AND DAIRIES (SPECIAL DEISGNATION) REGULATIONS, 1960: Insofar as licences granted by a food and drugs authority are concerned, the above Regulations came into effect on the 1st January, 1961. Supplementary licences are now discontinued, and dealers' licences now permit the sale of milk in areas outside the licensing authority. Licences, valid for a five year period permit the use of "special designation" e.g. "Tuberculin Tested", "Pasteurised", etc., in relation to milk produced and distributed under the condition laid down in the Regulations. The following licences, renewable in 1966, were granted.

35

in 1966, were granted.

Dealers' (Pre-packed Milk) Licences ...

MILK (SPECIAL DESIGNATIONS) (SPECIFIED AREAS) (No. 2) ORDER, 1954.

This Order defines an area, which includes the area of the County Borough of Bolton, in which no milk may be sold by retail unless it has either (a) been derived from a tuberculin tested herd and/or (b) been treated by pasteurisation or sterilisation.

Cream does not necessarily have to be derived from a tuberculin tested herd or be heat-treated. Six samples of cream and cream cake fillings were taken, and all were found to be of a satisfactory standard bacteriologically.

DAIRIES AND DAIRY VEHICLES:

			Dairy
		Dairies	VEHICLES
No. of inspections	 	84	169
No. of notices served	 	5	10

Most of the dairy vehicles were of a good standard. Warnings have been given, however, concerning the absence of name and address on retailers' vehicles.

SAMPLING OF MILK FOR BACTERIOLOGICAL EXAMINATION:

Samples of milk were taken regularly from dairies, pasteurising establishments, milk shops, schools and vending machines, and during course of delivery to consumers. Details of the examinations carried out are given on page 159.

One sample failed to satisfy the methylene blue test prescribed in the Milk (Special Designations) Regulations, 1960. This milk was supplied by a dairy outside Bolton and the matter was referred to the authority in whose area the pasteuriser's premises were situated for investigation. Subsequent samples were found to be satisfactory.

BIOLOGICAL SAMPLING OF MILK:

Fifty-three samples of raw milk were submitted to the Pathology Laboratory of the Bolton Royal Infirmary for examination. Thirty-five samples were from individual animals in one herd following a positive result for Br. abortus. Two animals in the herd were found to be excreting Br. abortus and were slaughtered voluntarily. In all other cases the samples were reported negative.

SAMPLING OF MILK FOR CHEMICAL ANALYSIS:

Five hundred and sixty-one samples were taken, ten of which were reported as unsatisfactory.

In three instances, involving eight samples, the samples were taken from batches of churns from the same supplier, and although the individual samples were below the legal standard, the average for each consignment as a whole was satisfactory.

Two bottles of milk, obtained primarily for bacteriological examination, were found to be deficient in fat. In each case, repeat samples were satisfactory.

Bacteriological Examination of Ice Cream

Fifty-two samples of ice cream were taken from manufacturers and vendors. Seventeen samples were reported as unsatisfactory according to the *provisional gradings* of the Public Health Laboratory Service, and in addition three samples which satisfied these standards were, however, contaminated by intestinal organisms and were also classed as unsatisfactory. Details of the samples are given on page 160.

A large number of the unsatisfactory samples were those taken during various stages of production, when investigating the cause of unsatisfactory samples from a local manufacturer.

There are five local producers of ice cream using a boiling process, and occasionally two other firms produce ice cream using a cold mix method. Three out of the five first mentioned employ a Consultant Bacteriologist for regular batch testing, but even with this valuable adjunct to the sampling carried out by the Health Department, occasionally a few samples fail the provisional grading. In the other two premises where the boiling process is used, thorough examination of the plant on frequent occasions and routine testing has not shown any permanent remedy, but it should be emphasized that there is insufficient evidence which would justify a recommendation to the Health Committee that the registration of the premises be revoked.

These tests are merely a yard stick as a guide to the public health inspector, and they are acted upon accordingly. The majority of samples taken in the Borough where ice cream has been manufactured in outside areas are nationally marketed products, and generally speaking, of a very high standard. The one reported as unsatisfactory on a provisional grading was found to have been inadvertently contaminated by a knife used for cutting the block of pre-packed ice cream.

Inspection of Meat and Other Foods:

The inspection of food at slaughterhouses, markets and food shops has continued to be carried out with great efficiency, and for this purpose 3,282 visits were made by the inspectors.

Meat Inspection:

The rate of slaughtering was as follows:

	CATTLE	CALVES	SHEEP	Pigs	TOTAL
Average Weekly "Kill"	327	28	748	398	1,501
Maximum Weekly "Kill"	369	59	1,391	556	2,375

The following table shows the number of animals slaughtered and inspected, together with the incidence of diseases and other abnormalities in carcases inspected at the private slaughterhouses and the public abattoir:

	Cattle ex- cluding Cows	Cows	Calves	Sheep and Lambs	Pigs
Number killed	8,130	8,859	1,466	38,884	20,675
Number inspected	8,130	8,859	1,466	38,884	20,675
ALL DISEASES EXCEPT TUBERCULOSIS AND CYSTICERCOSIS: Whole carcases condemned	12	16	10	11	37
Carcases of which some part or organ was condemned	2,794	2,891	-	1,439	1,382
Percentage of the number inspected affected with disease other than tuberculosis and cysticerci	34.5	35.8	0.7	3.7	6.9
TUBERCULOSIS ONLY: Whole carcases condemned	2	-	-	-	1
Carcases of which some part or organ was condemned	14	8		_	51
Percentage of the number inspected affected with tuberculosis	0.2	0 · 1	-	-	0.3
Cysticercosis: Carcases of which some part or organ was condemned	11	26	-	-	-
Carcases submitted to treatment by refrigeration	11	26	-	-	_
Generalised and totally condemned	-	-	-	-	-

Analysis of Parts or Carcases of Animals Condemned

This table gives the percentage of the various conditions found, in relation to the total number of animals affected. Some animals were found to be affected with two or more conditions.

Nature of Disease or Condition		PERCENTAGE
Tuberculosis		0.9
Cysticercus Bovis	 	0.4
Distomatosis (Liver Fluke)	 	37.7
Septicaemia and Pyaemia	 	2.6
Mastitis	 	16.5
Actinomycosis	 	0.5
Pneumonia and Pleurisy	 	16.1
Others	 	57.1

The number of animals slaughtered during the year is shown in the following table.

	1960	1961	1962
Cattle excluding cows	6,979	7,755	8,130
Cows	7,801	8,162	8,859
Calves	2,068	1,812	1,466
Sheep and Lambs	39,261	46,964	38,884
Pigs	19,212	20,100	20,675

One hundred per cent meat inspection was maintained throughout the year, which entailed an inspector being on duty every weekend.

Cysticercus Bovis

Thirty-seven cases of cysticercus bovis were discovered on inspection at the various slaughterhouses. All cases were dealt with by refrigeration, in accordance with Memo 3/Meat before being released for human consumption. The animals were obtained from widely separated areas, four cases occurring in Irish cattle. Five cases were discovered by incising the heart muscles, no lesion being found in other sites in the carcase or the offal, which again proves the necessity for this method of inspection, in addition to the more usual method of only incising the cheek muscles, if this condition is to be found as effectively as possible.

Foodstuffs Condemned

	Tons	Cwts.	QRS.
Meat (Fresh)	 53	11	1
Meat (Tinned)	 1	9	4
Boiled Ham (Tinned)	 1	17	3
Tongue (Tinned)		8	1
Fish (Fresh)		14	
Fish (Tinned)		12	3
Milk (Tinned)		4	1
Poultry and Rabbits		3	1
Fruit and Vegetables (Fresh)	 4	18	2
Fruit and Vegetables (Tinned)	 4	10	1
Provisions (Miscellaneous)	 2	10	2
Total	 71	_	3

Disposal of Condemned Meat:

During 1962 all condemned meat and offal was collected in accordance with the appropriate regulations. Facilities were again given for the collection of certain glands and organs for pharmaceutical purposes under strict control of the meat inspectors. All other items were processed for use as fertiliser or animal feeding stuffs.

Slaughterhouses:

A number of improvements have been carried out at the private siaughter-houses within the borough.

Slaughter of Animals Acts, 1933-1958:

During the year thirty-nine licences were issued to slaughtermen. No contraventions of the Acts or Regulations were reported.

Diseases of Animals Acts:

FOOT AND MOUTH DISEASE:

There have been no outbreaks of this disease locally during the year and the borough has not been included in any restrictions.

FOWL PEST:

Restrictions were imposed on only one premises in the borough during the year because of a suspected case which was not confirmed.

TUBERCULOSIS (ENGLAND AND WALES ATTESTED AREA) ORDER, 1960:

The full effect of this Order is being shown this year in the incidence of tuberculosis found on meat inspection, only one case being found in home produced cattle, as against a figure of 1,297 in 1959, 347 in 1960, and 11 in 1961. All other cases found this year were in imported Irish cattle, non-attested, which are allowed into this country for slaughter on licence to certain approved centres.

Cases found in cattle bought in this country are reported to the Ministry of Agriculture, Fisheries and Food for tracing.

TUBERCULOSIS ORDER, 1938:

It is significant to note that again there were no animals slaughtered under this Order during the year.

ANTHRAX ORDER, 1938:

Six cases of suspected anthrax were investigated (five pigs and one bullock). The disease was not confirmed in any of the cases.

SWINE FEVER ORDER, 1938:

Three cases of suspected swine fever were found on inspection at the public abattoir and one of the private slaughterhouses. Two of the cases were confirmed and the other was not.

As a result of several outbreaks of this disease occurring within the County, movement restrictions were imposed over almost the whole of Lancashire, in cluding Bolton, from 3rd December, 1962, and were still in force at the end of the year. During this period 87 licences were issued controlling the movement of 799 pigs.

Legal Proceedings:

On the 11th May, 1962, a pig breeder was fined £2 in the Bolton Magistrates' Court for moving pigs from the Bolton Auction Mart without obtaining a licence authorising the movement, in contravention of the Regulation of Movement of Swine Order, 1959, made under the Diseases of Animals Act, 1950.

Food and Drugs Sampling for Chemical Examination:

The following samples of food and drugs were obtained by the public health inspectors for chemical analysis:

Food Samples:			GENUINE	Unsatisfactory	Total
Formal			17 382	28	17 410
Drug Samples: Formal Informal	• • •	•	- 71	_ 10	_ 81
			309	8	317
Informal		•	242	2	244
Тотаі	LS .		1,021	48	1,069

Full details of the above samples are given in Tables A & B and on pages 166 to 169. Action in respect of the unsatisfactory milk samples is reported on page 168.

Other Foods and Drugs:

Structural improvements:

In all cases of unsatisfactory samples, action was taken by way of warnings to the vendors or manufacturers of the products concerned, or by the surrender and destruction of the goods.

Food Hygiene

Details of the visits made, etc. in connection with the enforcement of the Food Hygiene (General) Regulations, 1960, are given in Table 3 on page 149. As a result of this work the following improvements were effected in the town's food premises.

Floors	 	 	 113
Walls, ceilings	 	 	 310
Doors, windows	 	 	 54
Decorations	 	 	 119
Lighting	 	 	 23
			 12
Drainage	 	 	 9
Fittings, equipment, etc.:			
rittings, equipment, etc			
Sinks, etc	 	 	 31
Wash hand basins, etc	 	 	 78
Water supplies - cold	 	 	 16
Water supplies - hot	 		 28

Special attention, including evening and weekend visits, has been paid to the hot dog vending machines situated at various points around the town centre. As in previous years, special inspections were also made of all school meals and hospital kitchens and detailed reports and recommendations were sent to the Chief Education Officer and Bolton and District Hospital Management Committee respectively.

Shop fittings, equipment, etc.

Miscellaneous improvements

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A new development in food hygiene during the year consisted of the swabbing of mechanical equipment, chiefly mincing machines, at butchers' shops for the purpose of bacteriological examination. During the year fifty-seven such visits were made and a total of three hundred and sixty-four swabs taken for bacteriological examination. Of these swabs one hundred and twenty-one (one-third) were found to be positive; although none of the organisms identified were found to be food poisoning organisms the results did, nevertheless, indicate faulty cleansing of equipment. Follow-up visits were made to the premises from which positive results had been obtained and advice regarding the cleaning of equipment given to the staff.

Contamination of Beer:

Arrangements have been made with the co-operation of the various Brewery Companies and Licensees which it is hoped will preclude contamination from spillage beer.

Briefly, some breweries have decided voluntarily to stop using economisers which return beer spillage to the main tank in their houses. Others have agreed that each time a customer is served a clean glass should be used.

In addition, waste beer from trays and glasses will not be re-served. The use of suitable sterilising compounds in water used for washing-up of glasses and apparatus is already standard practice; glasses are now taken from various licensed premises for a special type of bacteriological examination for the purpose of checking whether the sterilising process is satisfactory. A system evolved by the Health Department, in co-operation with the Bolton Pathology Department (Director, Dr. G. B. Manning) enables glasses selected at random both before and after the washing-up process in public houses, to be examined. Where colonies of potentially dangerous organisms exist the glass is stained to show in relief on the glass surface, red areas of bacterial growth. This is illustrated in the photograph opposite. The media used in the bacteriological process supports the growth of a wide range of organisms, e.g.

Streptococcus viridans Escherichia coli Neisseria catarrhalis Enterococci Pneumococci Salmonella

Bacillus subtilis Streptococcus haemolyticus Staphylococcus aureus Monilia fungi (causes Thrush)

Staphylococcus albus

At the base of the glass any or all of these organisms may be revealed because of contamination of the hands of the barman.

This method illustrates in a dramatic manner when gross contamination of glasses has occurred. At the same time, it is also proposed to take bacterial counts and coliform estimations using standard techniques which are well-known, from washing-up waters and drying cloths. In addition, average plate counts will be taken from glasses, using as a standard the ideal laid down by the Research and Standards Committee of the American Public Health Associations



Photograph by courtesy of Cornbrook Brewery Company Limited

The bar dispensers used for the serving of beer to prevent overspill from glasses.



Photograph by courtesy of Cornbrook Brewery Company Limited
The tanks used in the 'Closed Circuit' system of serving beer.



Photograph by courtesy of Dr. G. B. Manning Bolton Department of Pathology

Visual bacteriological contamination of a beer glass.

Blocks kindly supplied by "Municipal Engineering" Journal



in 1944, i.e. satisfactory means less than 100 for the area swabbed. In the case of washing-up waters the standard will be bacteriologically satisfactory where the total colony count does not exceed 1,000 per 1ml. with the presumptive coliform test negative. This standard will necessarily be effected by whether or not bactericides are used in washing-up water and whether the washing-up water is changed frequently or maintained at a high temperature. Great importance is attached to the need for a constant supply of hot water in all public houses.

It is now possible to convince barmen and others by visual demonstration, that the standard of hygiene in public houses can be improved and, no doubt, public health officers will take appropriate measures to make beer cleaner in public houses and clubs everywhere.

A practice which has now been adopted by several breweries is designed to avoid contamination and virtually prevent overspill in the serving of draught beer, but it entails new installations at a cost of about £250 dependent on the size of house.

These installations are of glass or plastic lined air-tight beer tanks containing five to ten barrels of beer which is delivered by tanker through an air-tight "closed circuit". The dispensers at the bar deliver a measured pint or halfpint into glasses which are larger than those in normal use being marked at the pint or half-pint level and having a sufficient space above to accommodate froth without overspill. Nothing can be returned to the barrel, and so far as can be seen, the tanks cannot be opened without loss of pressure, the system being pressurised without carbon dioxide.

A photograph of the "closed circuit" system by courtesy of "Municipal Engineering" and the Cornbrook Brewery Co. Limited, Manchester, is shown opposite page 134. From a public health viewpoint, this system is worthy of special commendation.

Food Hygiene (General) Regulations, 1960:

During the year the following prosecutions were instituted for failure to comply with the regulations:-

PREMISES NATURE OF OFFENCE PENALTIES

Butcher's Shop Lack of cleanliness of Fined £30 + £4 4s. costs.

floors, equipment, etc.

Ice Cream Sales Vehicle Absence of hand-washing facilities; lack of cleanliness.

Premises used for manufacture of hamburgers premises; absence of for sale from hot dogs vehicles.

Lack of cleanliness of Fined £60 + £10 10s. costs.

Fined £60 + £10 10s. costs. This defendant was also fined £40 for being in possession of minced meat unfit for human consumption.

Town Centre Restaurant.

Lack of cleanliness of premises, equipment, food washing and equipment washing appliances, absence of soap at wash-hand basin. Fined £102 + £10 10s. costs.

One effect of these cases has been a considerable increase in the number of complaints made by members of the public regarding unsatisfactory foodstuffs; all these complaints are closely investigated and even in those cases where no prosecution is instituted appropriate action is taken with the shop-keepers or manufacturers concerned.

A new development in this field has been that of carrying out intensive bacteriological sampling of equipment and utensils in butchers' shops with a view to detecting dangerous contamination or unsatisfactory methods of cleaning. Where unsatisfactory results have been reported advice has been given to the shopkeeper concerned.

Food Complaints

A notable feature this year was the striking increase in the number of complaints made by members of the public, regarding foodstuffs, i.e. fifty-four complaints compared with thirteen during 1961. A large proportion of the complaints referred to the presence of foreign bodies in foodstuffs and are indicative of careless methods of food handling. All complaints were carefully investigated and where necessary legal proceedings were instituted. Details of the cases are given below:

"Canned carrots having an unpleasant taste". Ingredients and can satisfactory but carrots had an unpleasant taste. Stock destroyed.

"Milk bottle containing a plastic button." Bottle empty. Letters to Milk Marketing Board.

"Can of stuffed pork roll containing claw like object." Examination proved "foreign body" to be "papillae" from pig.

"Cheese causing sickness." Chemical examination shows the cheese to be free from contamination or excess rancidity. Matter referred to the Local Authority in whose area the factory was situated.

"Meat pie with mould growth." Warning letter to manufacturer from Town Clerk. Purchaser did not wish legal proceedings.

"Fish cakes causing sickness." Analyst reported fish cakes free from abnormalities—the appearance, colour and taste were normal and they contained no evidence of mould growths or excessive acidity.

"Fruit tart containing beetle." Proceedings not taken—firm responsible in the hands of the Official Receiver as a result of legal proceedings for similar offences. Canned imported fruit from Poland. "Foreign Body in butter". Proved on examination to be a small portion of the kernel of a nut. Warning letter to manufacturer.

"Sliced loaf containing dark particles." Analysis showed that the black particles consisted mainly of carbon with a minute trace of iron, probably derived from the tins used in baking the bread. Warning letter to manufacturer.

"Hair in meat and potato pie." Warning letter to manufacturer as purchaser did not wish legal proceedings to be taken.

"Pre-packed meat with surface contamination". Contaminated by dust, particles of carbon, vegetable fibres and sawdust. Proceedings taken against the packer resulting in a fine of £20 plus £7 7s. costs.

"Hair in black pudding." Examination showed that the pudding contained approximately 35 pig hairs which had been cooked in the pudding. Proceedings taken against the manufacturer resulting in a fine of £20 plus £7 7s. costs.

"Pork pie containing dark particles." These were found to be particles of iron oxide. Warning letter to manufacturer.

"Sliced loaf containing dark particles." These were found to be small amounts of mineral oil. Letter to manufacturer.

"Sliced loaf containing patches of brown coloured particles." These were found to be husks and other fragments of whole-meal flour. Letter to manufacturer.

"Bread containing blue paper." Warning letter to manufacturer as purchaser did not wish legal proceedings to be taken.

"Pickled cockles having abnormal appearance." Found to be in a satisfactory condition and free from abnormalities.

"Sliced loaf containing dark particles." These were found to be mainly carbon and traces of iron. Letter to manufacturer.

"Portion of gooseberry tart containing a piece of wood." No evidence found to suggest that the wood was in fact found in the tart.

"Potato crisps containing a fly." Found to be a blow fly, packet had been opened and some crisps eaten. Unable to prove that the fly was in the packet when purchased. The producer was informed of the complaint.

"Mouldy rye meal." This meal, together with a further sample from the same shop were examined and no evidence of any mould growth found.

"Pre-packed black pudding containing mould growth." Legal proceedings taken against the vendor resulting in a fine of £5 plus £7 7s. costs.

"Loaf containing a piece of rag." Legal proceedings taken against the manufacturer resulting in a fine of £10 plus £5 5s. costs.

"Meat and potato pasty containing fibres." Legal proceedings were taken against the vendor resulting in a fine of £10 plus £5 5s. costs.

"Portion of sliced loaf containing dark particles." These were found to consist of silica and carbon baked with the bread. Letter to manufacturer.

"Portion of loaf containing insect." Examination proved extraneous matter to be a portion of dried fruit. The manufacturer was informed of the complaint.

"Swiss roll containing mould growth." Warning letter to the manufacturer as the purchaser did not wish legal proceedings to be taken.

"Meat and potato pie containing a hair." Examination showed that the extraneous matter was part of the root fibre of the potato plant. The matter was taken up with the manufacturer and resulted in improved methods of food preparation.

"Lemon squash causing diarrhoea." Analytical and pathological examinations both gave negative results. Local Authority, in whose area the lemon squash was made, notified.

"Salmon cutlet containing paper." Warning letter to vendor.

"Malt and molasses tea loaf containing mould growth." Loaf manufacturer is in Sussex—excessive time in delivery—no further supplies outside manufacturer's own locality.

"Sliced bread and butter containing mould." Warning letter to vendor.

"Steak and kidney pie containing string." Legal proceedings were taken against the manufacturer resulting in a fine of £12 plus £5 5s. costs.

"Sliced loaf containing dark particles." These had the appearance of graphite with traces of mineral oil. Warning letter to manufacturer.

"Bread containing wire." Legal proceedings were taken against the manufacturer resulting in a fine of £15 plus £5 5s. costs.

"Breakfast cereal containing dark particles." These were found to be burnt cereals with small amounts of iron oxide and silica. Warning letter to manufacturer.

"Portion of bread with brown coloured fragments." These were found to have the characteristics of chitinous cuticle too small to be identified.

"Iced bun containing insect." This was found to be niptus hololeucus. The purchaser did not wish legal proceedings to be taken. Manufacturer's premises visited and advice given re eradication.

"Glacé pineapple containing mould." This was found to be a ball of dirty cotton fibres which was covered by a thick sugar layer and had obviously been present before the fruit was sugar treated. This complaint was brought to the notice of the importer.

"Loaf containing wire." Legal proceedings were taken against the manufacturer resulting in a fine of £10 plus £7.7s. costs.

- "Custard tart." Found to be satisfactory on examination.
- "Glass in tinned salmon." Found to be struvite crystals.
- "Flat-cake containing an insect." Found to be the flattened epidermal and adjacent tissue from a currant.
- "Meat pudding containing a pink substance." Found to be satisfactory—free from preservatives and colouring matter.
- "Meat and potato pasty containing a wood screw." Legal proceedings taken, vendor fined £10 plus £5 5s. costs.
- "Crumpets containing mould growth." Legal proceedings taken, vendor fined $£20\,\text{plus}\,£4\,\text{4s.}$ costs.
- "Cream sandwich containing mould growth." Legal proceedings taken, vendor fined £20 plus £4 4s. costs.
- "Bottle of milk developed a blue colour on standing." Found to be satisfactory after centrifuging after a period of three days standing.
- "Brown bread containing dark patches." Found to be traces of mineral oil with black particles of carbonaceous matter. Warning letter to manufacturer.
- "Sugar containing insect larva." Found to be larva of ephestia kuhniella. Warning letter to vendor and advice re disinfestation. Purchaser did not wish legal proceedings.
- "Cottage cheese containing mould." Letter to vendor and manufacturer as purchaser did not wish legal proceedings.
- "Jam containing an insect." This was found to be a species of bee. Warning letter to manufacturer.
- "Dried apricots containing larva." Warning letter and advice re disinfestation given to packer.
- "Meat and potato pie containing insect fragments." Referred to Town Clerk for legal proceedings.

In all the above cases, investigations were carried out to determine the responsibility for the presence of the foreign ingredient or the deterioration. In many instances warning letters were sent when insufficient evidence could be found for formal action or when the complainants were unwilling to participate in legal proceedings.

Infestation in Food:

The following shows the number of samples examined during the years 1957 to 1962, together with the percentage found to be infested with mites or insects and/or rodent excreta:

	Number of Samples	Number of Samples
Year	Examined	Found to be Infested
1957	81	28 (35%)
1958	112	33 (30%)
1959	115	20 (17%)
1960	144	5 (3.5%)
1961	177	21 (12%)
1962	96	4 (4.16 %)

96 samples of cereals, dried fruit and other foods were submitted for examination. Of these, four were found to be infested by mites, insects or rodent excreta, to such an extent as to render them unfit for human consumption. Affected stocks were surrendered for destruction and investigations to locate the source of infestation were carried out with the co-operation of the Infestation Control Division of the Ministry of Agriculture, Fisheries and Food.

GENERAL SANITATION

Conversion of Waste Water Closets:

During the year 400 grants for the conversion of waste water closets to fresh water closets were offered to owners, and by the end of the year 114 of these grants had actually been paid. The average cost of conversion is from £30 to £35 at the present time, while the amount of the grant remains £10. It is estimated that there are still approximately 3,000 waste water closets remaining in the borough.

Provision of Dustbins:

Where dustbins were required (including replacements) relevant information was obtained verbally from the tenants concerned, and opportunities were given to their landlords to submit their own written observations. Where any such observations are made in writing by the landlord, the decision as to whether the occupier or the landlord shall be required to supply the bin is made by the special Sub-Committee of the Health Committee. During 1962 it was necessary for the Sub-Committee to meet on only one occasion. During the year twenty-two cases were dealt with; where statutory notices were not complied with, bins were provided by the Corporation in default.

Public Water Supplies:

All employees of the Waterworks Department who are directly concerned with the water supply are required to submit one specimen of faeces annually for bacteriological examination; new employees are required to submit faecal specimens on three successive days, and a specimen of blood is also taken for a Widal test. During the year specimens were submitted by thirty-five members of the staff (including eight new members), all being reported negative.

Mr. H. R. Davenport, the Waterworks Engineer and Manager, has supplied the following information regarding the water supply to the borough:

"The water supply of the area and of its several parts was satisfactory both as regards quality and quantity.

The water supply of the area is at present filtered at three filter stations. Normally, samples of both raw and filtered water are subjected to full bacteriological analysis each week and to full chemical analysis every three months by the Borough Analyst. Special examinations and analysis are made as circumstances require.

During 1962, 147 samples of raw and 150 samples of filtered water received bacteriological examination and 12 samples of both raw and filtered water received chemical analysis. In addition, 51 samples of water from the supply of the Lake District Undertaking were examined and the results showed that the filtered and treated water was of excellent quality, B.Coli being absent in 99% of the potable water samples tested. Where 100% bacteriological purity was not obtained a second sample taken proved to be satisfactory. All water is treated before passing into supply.

From tests made weekly, the final water was shown to have no significant plumbo-solvent action.

No action was required to be taken in respect of any form of contamination.

Regular bacteriological examination of the water in the distribution system has been carried out during the year, B.Coli being absent in all of the 273 samples tested.

The public water mains afford a direct supply to a population of approximately 160,650 and 56,895 dwelling houses—no supply was afforded to dwelling houses by stand pipe.

During the year an additional 363 yards of 2", 1,977 yards of 3", 1,735 yards of 4", 435 yards of 6", 218 yards of 9", 8 yards of 12" and 483 yards of 18" diameter water mains were laid.

The information supplied is in respect of the County Borough of Bolton, although the Undertaking's area of direct supply includes adjoining local authorities."

Sewage Disposal:

The following information has been supplied by Mr. F. W. Allen, Manager, Bolton and District Joint Sewerage Board:

"During 1962, the sewage treatment plant at Hacken dealt with a total flow of 4,378 million gallons representing an average of 12.0 million gallons per day. Six million gallons of this daily flow was given full treatment by the activated sludge process followed by high-rate biological filtration. Tests made on the effluents from these processes showed that of 194 samples examined 185 were satisfactory. Similarly, of the 6.0 million gallons per day which could not be given full treatment, only 59 samples were satisfactory out of the 193 examined.

The Bolton and District Joint Sewerage Board approved terms and conditions for regulating the nature and quantity of trade effluents discharged from 15 premises into the Bolton sewers and treated at the Hacken works.

During the year considerable progress has been made in the construction of the large regional treatment works at Ringley. This is expected to be completed rowards the end of 1963 and able to take all the sewage now treated at Hacken."

Factories Act, 1937:

There are 971 factories within the borough which were the subject of 546 inspections, resulting in 90 cases in the service of written notices upon the factory occupiers. Full details of the work carried out under the Factories Act, 1937 are contained in Tables 7 to 10 on pages 152 and 153. Many of the larger cotton mills which have been discontinued as such under the cotton reorganisation scheme are now being converted for multiple occupation by several different factory occupiers; these premises are, of course, subject to section 102 of the Factories Act, 1937, which places the responsibility for certain matters upon the owner as distinct from the occupier of the individual "factory" concerned.

Shops Act, 1950:

There are 1,172 shops within the borough subject to the provisions of this legislation. The sanitary provisions of the Act relating to heating, ventilation, lighting, sanitary accommodation, washing facilities, facilities for taking meals and seats for female shop assistants, are administered by the public health inspectors. During the year 373 routine visits were made and ten verbal or written notices issued. Twenty-three improvements were effected as a result. Many premises, e.g. food establishments, etc. are, of course, shops within the meaning of the Act, and the provisions of the Shops Act are borne in mind during routine inspections of such premises.

Houses-In-Multiple-Occupation:

The Housing Act, 1961 contains important new provisions relating to houses-let-in-lodgings or occupied by members of more than one family. Briefly the Council can require the persons having control of such houses to provide such amenities (e.g. facilities for storing, preparing and cooking food; sinks; wash-hand basins; etc.) as they feel to be necessary. If the Council's notice is not complied with the Council can carry out the necessary improvements in default of the persons having control, and recover the expenses incurred in doing so.

Similar action can be taken in respect of the provision of satisfactory means of escape from fire. Where houses in multiple occupation are not being satisfactorily managed the Council can make a Management Order, which has the effect of applying the Housing (Management of Houses in Multiple Occupation) Regulations, 1962 to the premises; when this has been done failure to comply with the management regulations renders the proprietor liable to legal proceedings.

It is estimated that there are approximately 250 houses-let-in-lodgings in the borough and, despite staffing conditions, a start was made in carrying out the necessary detailed inspections and serving the initial notices. Considerable difficulty is, however, experienced in gaining access to all lettings as so many tenants are out working during the day, and evening visits are frequently required. Language difficulties have also presented a serious problem, particularly in houses occupied by Asian immigrants.

There are two common lodging houses in the town, i.e. in St. George's Road and Crompton Street respectively. Both premises are operated by the Salvation Army; in the former case the premises are both owned and managed by the Salvation Army, while in the latter case the premises are owned by the Corporation and leased to the Salvation Army. Routine improvements have been carried out at both premises during 1962.

Offensive Trades:

There were four offensive trades within the borough, i.e.

1 Fellmonger

1 Gut-scraper

1 Fellmonger and gut-scraper

1 Tripe Boiler

There are no local byelaws affecting these trades, but the comparatively small number of premises involved, and the satisfactory standards of cleanliness and maintenance achieved do not justify the making of special byelaws.

Hairdressing Establishments - Baeteriological Examination of Equipment:

Since April, 1962, eighty-five hairdressing premises have been inspected as a result of complaints received regarding unsatisfactory conditions at certain establishments. In order to check on the adequacy of cleanliness, with particular reference to items of equipment, swabs were taken for bacteriological examination as follows:

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The Pathology Laboratory reported the presence of staphylococcus aureus (coagulase positive) on eleven swabs. This germ is a pathogenic species and can be associated with suppurative lesions of varying severity in man, (e.g. pimples, boils, etc.).

As a result of the investigations, 13% of the hairdressing premises were reported as unsatisfactory. In four cases the hairdressers have now installed new sterilizers and in the others, the methods of sterilization of equipment have been changed.

In all cases where an unsatisfactory report has been made, the premises have been re-inspected. There has been the fullest co-operation from the hair-dressers. The investigations are being continued.

Hairdressing Establishments:

There were 253 hairdressing premises registered in accordance with the Bolton Corporation Act, 1949, section 48. 260 inspections were made and 11 improvements effected

Pharmacy and Poisons Act, 1933 - The Poisons Rules, 1952:

The names of 182 persons are included in the local authority's list of persons entitled to sell poisons in Part II of the Poisons List. The attention of shopkeepers etc. has been drawn as necessary, either verbally or in writing, to any contraventions of the Act or the Poisons Rules.

Pet Animals Act, 1951:

Thirteen licences were issued and thirty inspections were made. The premises generally have been satisfactorily conducted, but where necessary verbal warnings or advice have been given.

Rag Flock and Other Filling Materials Act, 1951 Rag Flock and Other Filling Materials Regulations, 1951 - 1954:

This legislation prescribes standards of cleanliness for filling materials used in upholstered articles and stuffed toys and the local authority are required to register premises where the relevant operations are carried out. There were nineteen premises in the borough registered under the Act.

WASHED RAGS:

Eighteen certificates as to the bacteriological cleanliness of washed rags for the export trade were issued to a local firm.

Nuisances From Noise:

Implementation of the Noise Abatement Act, 1960 has continued during the year. Twelve further major complaints were received and two of these, after investigation, were found to be unjustified. The remaining complaints could be classified as follows:

COMPLAINT OF NOISE	FROM	ı								Number
Industrial plan										
general garag	ge noi	ises.								5
										1
Club premises		• •	• •	• •	• •	• •	• •	• •	• •	1
Domestic Premises										
Joinery work										1
Refrigerator										1
Barking dog										1

A case concerning week-end noise from a club received prompt attention by the removal of an amplifier; the noise level was diminished quite considerably.

Statutory action was taken in only one instance, which, after the making of a Nuisance Order, led to the voluntary closure of a joiner's woodworking premises, the noise from which had been causing serious nuisance to the immediate neighbours.

Several other cases have been resolved by mutual agreement or informal experimentation.

Fertilisers and Feeding Stuffs Act, 1926:

Seventeen informal samples were taken and submitted for analysis. Discrepancies were found in three cases and appropriate warnings were given.

DISINFECTION AND DISINFESTATION

Disinfection:

Routine terminal disinfection of premises after cases of illness is carried out in special cases only. No charge is made where such work is carried out in the interests of public health. Details are given in Table 11 on page 154.

A special stock of equipment, together with a supply of formaldehyde, and a mixture of carbolic soap, water and white cyllin, is retained at School Hill in readiness for immediate use in the event of smallpox occurring. Facilities exist for the disinfection of vehicles and special containers are available for enclosing infected mattresses and bed linen.

Disinfestation:

The Department's pest control service continues to make steady progress, and an increasing number of occupiers of food or other business premises subject to special infestation risks continue to enter into annual agreements with the Corporation for regular treatment of their premises, with a view to preventing insect infestation; in many cases the agreements also provide for preventive measures against rodent infestation. There are now 150 agreements in force, and the annual income from pest destruction has now risen to £3,262. Table 12 on page 154 summarises the work carried out.

Regular destruction treatments to control the rat population in the sewers are carried out by the Borough Engineer's Department in collaboration with the Health Department. Warfarin is the poison in general use, but zinc phosphide and arsenious oxide are used on occasions, paranitrophenol being incorporated to inhibit mould growth.

The schools and school meals kitchens in the borough are surveyed at least once every two months to detect any rodent or insect infestation. Any necessary treatment is carried out immediately.

Control of the rodent population on the Corporation's controlled tipping sites is maintained by regular surveys and treatments. River banks are also subject to regular surveys and any infestation dealt with.

The Curator of Museums has supplied the following information:

"Beetles have, during 1962, maintained their position as the group of insects about which the department was consulted most frequently. Of the genuine pests, probably the wood-boring Anobium and the Spider-Beetle Niptus were brought in most often, but the most unusual case concerned the Basket Beetle, a severe infestation of which was discovered in a local mill, where the adult insects were found in large numbers on wicker baskets. The larvae of this species bore inside the stems of various species of willows, and the baskets appeared to have been made from already infected plants, from which the adult creatures emerged, to the dismay of the operators!

A very large number of specimens are brought in annually of species which are of purely accidental occurrence but which are mistaken for pests. During the year Spider-Beetles were brought in on several occasions in mistake for Bed-Bugs (true specimens of the latter are very rarely seen!), and a fairly large number of Burying Beetles, Necrophorus, were brought during the summer months as Colorado Beetles. No true specimen of this species has been seen however. Ground-Beetles seem to stray into houses quite frequently, where they are very often mistaken for Cockroaches, a number of such cases coming to the attention of the department, although several genuine specimens of the latter came in. They still seem to be common pests.

Of other groups, Spiders attracted considerable attention, particularly those which are large and striking as in the case of some of the Banana Spiders. A number of the more usual Heteropodas was brought in, almost always thought to be Tarantulas, whilst one specimen of the huge Bird Eating Spiders occurred, this having created great alarm when it was discovered! One can hardly imagine how a creature of this size (7 or 8 inches) could be overlooked, as, unlike the smaller species, it could hardly hide away in the banana bunches.

It is to be noted that despite the apparently discouraging summer weather conditions, considerable numbers of creatures did come to the notice of the public, and the number of consultations made in the Museums Department was more than usual during the year."

Mortuary:

The mortuary forms part of the premises at School Hill used as a Disinfection and Disinfestation Depot. An attendant is employed on combined mortuary duties and disinfestation.

Thirteen bodies were received at the mortuary during the year. Post mortem examinations were carried out on nine, all of them being coroner's cases. Refrigeration facilities are provided for the storage of the bodies.

Municipal Medical Baths:

The medical baths are situated in an annexe to the School Hill Depot. The cleansing of verminous persons is carried out by a part-time female worker and the foreman of the Depot.

A summary of the cases dealt with is given below:

	School o	School children		under five	Adults		
	Males	Females	Males	Females	Males	Females	
Head infestations	24	80	1	1	-	7	
Scabies	7	11	5	6	6	11	
Body Lice	_	-	-	-	26	1	
Totals	31	91	6	7	32	19	

Complaints:

TABLE 1

ompiaints:									
The following complain	ts w	ere re	eceiv	ed ar	id in	vesti	gate	đ.	
Housing defects							_		
Choked and defe	ctiv	a den	inc				• • •	727	
A commulations	e ag	c ura	1118		• • •	• • •		382	
Accumulations of	ноп	ensiv	e ma	atter	• • •	• • •	• • •	109	
Relative to unso			• • •		• • •			174	
Verminous prem									
(a) Bed bugs								5	
(b) Rat and :	mous	se inf	estat	tions				1251	
(c) Cockroad	hes :	and c	ther	inse	ct pe	sts		10	
Keeping of anim								14	
Smoke								84	
Noise								23	
Miscellaneous								325	
TTI OCCITATICO GO	• • •	• • •				• • • •	• • •		
	T	ОТАІ	CON	IPLAI:	NITC			3,104	
		OIAL	1OW	ir Lai.	1413			3,104	
		TAE	21 15	2					
tanding Commitments		I LX I	مسلم سالا ال	64					
Premises	Subj	ect	to R	louti	ne I	nspe	ectio	n	
				SHME		•			F PREMISES
								140. 0	
Common lodging hous							• • •	• • •	2
Houses-let-in-lodgings							• • •	• • •	255
Movable dwellings							• • •		48
Bakehouses									246
Basement bakehouses									4
Fish friers									155
Registered premises, S	Sec.	16 Fc	od a	ind D	rugs)	Act	, 195	55	510
Industrial canteens									122
Other catering establis	hme	nts							165
Miscellaneous food pr	epari	ing p	remi	ses					7 8
Ice cream premises—r	nanu	ifactu	ire						5
,, ,, ,, —s	ale c	nly							429
Meat shops									215
Slaughterhouses									4
Dairies									13
Milk distributors									533
** t t									1,617
Licensed premises (Or									312
", ", (Of	F_)	• • •							115
Food stalls	1)	• • •	• • •						121
									15
Vehicles—Meat ,, —Milk				• • •			• • •		123
							• • •	• • •	847
Factories (Mechanical))	,	• • •	• • •			• • •	• • •	
", (Non-mecha						• • •	• • •		124
Workplaces						• •			223
Shops	• • •								1,172
Outworkers' premises									111
Factory chimneys									209
Hairdressers' premises									253
Places of entertainmen									74
Clubs									64
Offensive trades									4
Registered premises, R	ag F	lock a	and (Other	Filli	ing A	later	rials	
Regulations, 1951 a	and I	1954							19
Pet shops (Pet Animal									13
(,	/						

TABLE 3

Detection of Sanitary Defects:

Summary of Visits and Inspections

Natu								o. of Visits
Dwelling-houses for housing	g def	ects i	unde	er Pu	blic :	Heal	h Ac	t:—
After complaint								1,384
Subsequent visits		• • •	• • •	• • •	• • •	• • •		2,939
Dwelling-houses under Hou	ısing	Acts	s :					
	• • •				• • •		• • •	451
Re-inspections, re-visits	• • •	• • •	• • •	• • •	•••	• • •	• • •	2,958
Certificates of Disrepair		•••	•••	• • •	•••	•••	•••	43
Infected dwelling-houses:— After notified infectious		(. la	مده ماه		1	-:->	201
Contacts				man		rcuic	9818)	381 95
Schools and church halls			•••		•••	•••	•••	14
	•••	•••	•••	• • •	•••	• • •	• • •	
Swimming baths	• • •	• • •	• • • •	• • •	• • •	• • • •	•••	-
Water sampling:—								
Swimming baths	• • •	•••	•••	• • •	• • •	•••	• • •	4
Dwelling-houses		• • •	• • •	••	•••	•••	•••	
Business premises			• • • •	• • •	•••	• • •	• • •	178
Cinemas, dance halls, billia	rds h	alls	• · •		• • •	• • •	• • •	26
Offensive trade premises	• • •	• • •						18
Stables, piggeries, keeping	of an	imal	S	> = 4				111
Houses-let-in-lodgings								170
Factories Acts, 1937 and 19								
Factories with mechanic								501
Factories without mecha	anica	l pov	ver	• • •	٠.			45
Outworkers' premises	• • •	• • •	• • •	• • •		• • •	• • •	21
Common lodging houses								6
Underground rooms								-
Hairdressing premises								260
Tents, vans, sheds					1			47
Smoke abatement:—								
Boiler house surveys								35
re Prior Approval applic								26
re Smokeless Zones and			Conti	rol A	reas			3,343
Smoke observations	• • •				• • •		• • •	336
Smoke investigations	• • •	• • •	•••	• • •	• • •	• • •	• • •	37
Re-visits Combustion readings	•••	• • •	•••	• • •	• • •	• • •	•••	313
Deposit gauge visits								27
Volumetric stations				• • • •				2,763
Noise abatement								301
Fairgrounds								23
Drainage:—								
Conversion from waste v	vater	to w	ater	carri	age s	vster	n	248
Miscellaneous tests and								285

NATURE OF VISIT	No. of V	ISITS
Public sewers	14	
Watercourses and ditches	18	
Land and tips	110	
Septic tanks and cesspools	12	
Sanitary conveniences—including public houses	225	
Miscellaneous visits	2.774	
Visits not inspections	651	
Verminous premises:—		
Rats and mice:—After complaint or from survey Subsequent and survey visits	1,251	
Bug infestations:—No. of premises visited	66	
No. of premises where definite i	infes-	
tation existed		
Cockroaches	372	
Other vermin	131	
Inspections for supervision of food:—	==	
Unfit foodstuffs other than meat	738	
Slaughterhouses and cold stores	2,238	
1924-1952 and Food Hygiene (General) Regular	nons,	
1960)	358	
Food Hygiene (General) Regulations, 1960:—		
Bakehouses		
Fish shops, grocers and greengrocers	104	
Factory canteens	210	
Hotel and beerhouse bars and cellars:—	319	
Day inspections	322	
Night inspections		
Food and Drugs Act, 1955—Section 16:—		
Ice cream premises (Heat Treatment Regs. 1947-	1952) 66	
Sausage manufacturers	28	
Preserved meat preparation premises	61	
Preserved fish preparation premises	7	
Milk and Dairies Regulations, 1949: Food and Drugs 1955—Section 91:—	Act,	
Milk sampling for bacteriological examination Contraventions of Milk and Dairies Regulations	219	
Dairies	84	
Shops Act, 1950—Section 38	373	
National Assistance Act, 1948—Section 47		
Diseases of Animals Acts and Orders	55	

TABLE 4

Notices Served:

Action to secure abatement of nuisances and to enforce the appropriate statutory enactments was taken as follows:—

Nature of Notice	Public Health Act 1936	Food Hygiene (General) Regulations 1960	Factories Acts 1937 and 1948	Byelaws: Hairdressers and Miscellaneous Premises
No. of informal notices served No. of informal notices com- plied with without recourse	530	175	51	18
to statutory action No. of statutory notices	190	177	35	14
served	369	_	_ :	_
No. of premises concerned No. of statutory notices com-	241	-	-	-
plied with	269	-	-	-
No. of premises concerned.	164	-	-	-
No. of cautionary letters sent by Town Clerk	112	-	-	

Outstanding notices from previous year are included.

TABLE 5

Housing Defects and Legal Proceedings:

A summary of general housing defects or disrepair of property where it was necessary to take legal proceedings, and the results of such proceedings, is given below:—

Casi	3	DETAILS OF	
No.	Statute	Contravention	RESULT
1	Public Health Act, 1936 – Section 93.	Failure to comply with abatement notice in respect of an accumulation or deposit.	Nuisance Order made against owner/occupier; costs of 9/6d, awarded.
2	Public Health Act, 1936 – Sections 45 and 95.	Failure to comply with Nuisance Order, and failure to comply with statutory notice in respect of defective sanitary accommodation.	Fines totalling £6/0/0d. imposed.
3	Public Health Act, 1936 – Section 93.	Failure to comply with abatement notice in respect of defective window and defective chimney stack.	Nuisance Order made against owner.
4	Public Health Act, 1936 – Section 93.	Failure to comply with abatement notice in respect of general defects.	Nuisance Order made against owner.
5	Public Health Act, 1936 – Section 39.	Failure to comply with statutory notice in respect of defective eavesgutter.	Fine of £1 imposed.
6	Public Health Act, 1936 – Section 93.	Failure to comply with abatement notice in respect of general defects.	Nuisance Order made and costs awarded to the Corporation.

7 Public Health Act, Failure to comply with abatement 1936 – Section 93. notice in respect of defective plasterwork and defective window and door 9,6d, awarded. frames.

In addition, thirty-two summonses were issued but withdrawn due to the works having been completed before the dates of the hearings.

TABLE 6

Sanitary Improvements Effected:

Action was taken under either the Public Health Act or the Housing Acts.

NATURE OF IMPROVEMENT	IMI	No. of Provements
Floors repaired		61
Internal walls repaired		358
Ceilings repaired		199
Doors and windows repaired		314
Stairs repaired		14
Roofs repaired		166
Chimneys and flues repaired		105
Eavesgutters repaired		139
Rainwater pipes repaired		55
Soil and waste pipes repaired	• • •	64
External walls repaired		101
Yards, paths, etc., repaired		19
Sanitary conveniences repaired		212
"Tippler" closet conversions		6
Refuse accommodation		39
Drains repaired		199
Fire-ranges repaired		24
Sinks, water supplies, wash boilers, etc., repaired		30
Miscellaneous		187

TABLE 7 Factories Act, 1937 Places of Employment Defects Found

	Numb	Number of cases in which defects were found						
Postinular			Refe	No. of cases in which				
Particulars	Found	Remedied	to H.M. Inspector	by H.M. Inspector	prosecu- tions were instituted			
Want of Cleanliness (S.1)	15	11	-	-				
Overcrowding (S.2)	-	-	-	-				
Unreasonable temperature (S.3)	-	_	-	-	-			
Inadequate ventilation (S.4)	17	16	-	-	-			
Ineffective drainage of floors (S.6)	-	-	-	-	-			
Sanitary Conveniences (S.7):— (a) Insufficient (b) Unsuitable or defective (c) Not separate for sexes	21 104 -	17 99 -	- -	- 6 1	- - -			
Other offences against the Act (not including offences relating to Outwork)	1	-	_	-				
Totals	158	143	-	7	_			

TABLE 8
Factories Act, 1937
Outwork (Sections 110 and 111)

		Section 110				
Nature of Work	No. of Outworkers in Aug. list required by Sect. 110	cases of default	No. of prosecutions for failure to supply lists	No. of instances of work in unwholesome premises	Notices served	Prosecu- tions
Wearing (Making etc.) apparel	7	-	-	-	-	-
Furniture and Upholstery	26	-	-	_	-	-
Brush making	1	-	-	-	-	-
Stuffed Toys	-	-	-	- 1	-	-
Making paper fancy goods	77	-	-	-	_	-
TOTALS	111	-	_	-	-	

TABLE 9

Factories Act, 1937 Places of Employment—Improvements Secured

Cleanliness improved			11
Temperature improved		 	_
Sanitary Accommodation:—			
Additional accommodation provided		 	17
Accommodation improved		 	95
Accommodation reconstructed		 	4
Ventilation improvements	• • •	 	16
Drainage improvements		 	3
Miscellaneous improvements		 	60

TABLE 10

Factories Act, 1937 Places of Employment Inspection for Purposes of Provisions as to Health

	Number	Numl	Occupiers	
Premises	on Register	Inspec- tions	Written Notices	Prosecuted
(i) Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by Local Authorities	124	45	4	-
(ii) Factories not included in (i) in which Section 7 is enforced by the Local Authority	847	501	86	-
(iii) Other premises in which Section 7 is enforced by the Local Authority * (excluding outworkers' premises)	36	13	_	_
TOTALS	1,007	559	90	-

^{*}Electrical Stations, Institutions, Building Operations and Works of Engineering Construction.

TABLE 11
Disinfection

	Free of Charge	On Payment of Charge	Total
Premises visited for Disinfection	11	4	15
Beds	36	119	155
Rooms	21	-	21
Articles	74	462	536
Articles Destroyed	61	-	61

The 15 premises disinfected free of charge were for the following reasons:—

Tuberci	ulos	is			 	 5
Cancer					 	 7
Vermin	ous	cond	ition	S	 	 3

TABLE 12
Disinfestation

	Nun				
Infestation by	Domestic Premises	Business & Industrial	Hospitals	Schools	Total
Bed Bugs	58	-	4	-	62
Cockroaches	253	74	18	22	367
Fleas	12	-	-	-	12
Golden Spider Beetles	8	_	_	-	8
Wasps	28	1	-	-	29
Wood Lice	5	-	-	7799	5
Body Lice	4	-	-	-	4
Silver Fish	10	5	-	4	19
House Fly	9	12	- 1	-	21
General Disinfestation	67	-	-	- 1	67
Others	19	3	-	-	22

TABLE 13 Destruction of Rats and Mice Prevention of Damage by Pests Act, 1949

		Түр	e of Prope	RTY			
	Local Authority	Dwelling Houses	Agri- cultural	All other (including Business and Industriai)	Total		
I. Total number of properties in Local Authority's district	129	57,319	102	7,072	64,622		
II. Number of properties inspected by the Local Authority as a result	(a) 63	586	7	595	1,251		
of (a) notification or (b) otherwise	(b) 134	259	228	5,613	6,234		
III. Number of properties (under II) found to be	Major 2	1	_	3	6		
infested with rats	Minor 31	479	_	265	775		
IV. Number of properties (under II) found to be seriously infested with mice	61	274	-	346	681		
V. Number of infested pro- perties (under III and IV) treated by Local Authority	94	754	-	614	1,462		
VI. Number of notices served under Section 4:— (1) Treatment	Nil						
(2) Structural Works (i.e. proofing)	Enforced under Public Health Act, 1936						
VII. Number of cases in which default action was taken by Local Authority following issue of notice under Section 4	Nil						
VIII. Legal Proceedings	Nil						
IX. Systematic control of blocks of buildings			9				
		155					

REPORT OF THE BOROUGH ANALYST

The work of the Borough Laboratories during the first part of 1962 was carried out under the guidance and direction of F. Morris, A.M.C.T., F.R.I.C. At the end of July, 1962 Mr. Morris retired after having served the County Borough of Bolton as Public Analyst for nearly fourteen years. It is with pleasure that I record a tribute to him from the present laboratory staff who wish him many happy years of retirement.

Work carried out in the laboratories during 1962 followed the established general pattern. The total number of samples examined during the year was 5,959; this number being very similar to the number examined in 1961 (5,974).

The greater portion of the work was carried out for the Health Committee. This included the chemical analyses of samples submitted under the Food and Drugs Act, and the bacteriological examination of milks, ice-creams, swimming bath waters, etc. Work was continued in the regular examination of samples taken in the survey of pollution of the atmosphere. Supplementary analyses were commenced to investigate comparative atmospheric conditions inside and outside selected dwelling-houses, and further work was carried out in the assessment of the amounts of polynuclear hydrocarbons at five sites within the County Borough. The general public of Bolton submitted a wide range of samples to the Health Department. These were very diverse in nature but invariably represented some form of complaint. There can be little doubt that there is an awareness in the minds of the general public in Bolton that they are entitled to goods, which in legal parlance, are of the substance and quality demanded.

Vigilance and diligence in keeping the quality of the public water supply under constant surveillance also formed a substantial and important part of the work of the laboratories. This function of the laboratories is carried out on behalf of the Waterworks Committee which finances in part the running costs of the laboratory.

A number of changes relating to that part of the law with which the laboratory is directly concerned resulted from new regulations which became operative in 1962. In June, 1962 The Food and Drugs (Legal Proceedings) Regulations, and The Milk and Dairies (Legal Proceedings) Regulations came into force. These regulations deal with the extension of certain sections of the Food and Drugs Act, 1955, to embrace regulations made under the Act not previously included. These sections deal with evidence by a Public Analyst, matters relating to sampling and procedure where a contravention is due to some person other than the person charged, and the use of a warranty as a defence.

The Milk and Dairies (Emulsifiers and Stabilisers) Regulations became operative in April, 1962. These prohibit the addition of any emulsifier or stabiliser to milk, and the sale of milk containing such substances. The Emulsifiers and Stabilisers in Food Regulations, 1962 became operative in July, with partial extension to July, 1963. These prohibit the importation of food containing emulsifiers or stabilisers not included in the permitted list given in a schedule.

A regulation became operative in July, 1962 which will revoke in July, 1963 The Food Standards (Table Jellies) Order. This will mean that the special requirements of the Order will no longer be applicable. The quality of such products will still of course be required to satisfy certain requirements of The Food and Drugs Act.

Very important new legislation applicable to the work of the laboratorics became operative on the 26th of July, 1962 in the form of new regulations relating to the addition of preservatives to food. These include certain changes relating to the amount of previously authorised preservatives which may be added to certain foods, and a number of new preservatives are allowed to be added to food in prescribed limiting amounts. The number of foods to which preservatives may be added has been increased.

It is now permissible to add antibiotic, Tetracyclines, to raw fish providing the amount does not exceed five parts per million. The fungicidal antibiotic. Nystatin, is permitted in the skin of bananas but not in the flesh of the fruit. Sorbic acid, a compound of very low toxicity, may now be added in prescribed limiting amounts to cheese, marzipan, flour confectionery and solutions of approved food colours. Propionic acid can now be added to bread and flour confectionery. Certain esters of parahydroxybenzoic acid can now be present in liquid coffee extract, in drinking chocolate concentrate, in liquid tea extract, in grape juice products, in fresh grated horseradish, in tomato pulp, paste or puree, in liquid rennet and in sauces and pickles. The changes in the new Preservatives in Food Regulations will result in a not inconsiderable amount of additional analytical work in ascertaining compliance with the regulations. In addition, the new Milk and Dairies (Preservatives) Regulations became operative in July, 1962. These make it an offence to add any preservative to milk or to sell milk containing a preservative.

A number of Food Standards Committee Reports were issued in 1962. One dealing with Mineral Oil in Food made only minor recommendations and stated that the present Mineral Oil in Food Order does not require amendment. A report on Hard, Soft and Cream Cheese made recommendations regarding the control of composition by minimum legal standards, and recommendations regarding the labelling of these products. Another report proposed standards of quality for three distinct grades of dried milk.

A Food Standards Committee Report was issued in 1962 which included a set of draft regulations to control the minimum meat content of various categories of canned meat. As there seems to be a tendency to put more gravy, more dumpling or more vegetable in what is ostensibly a tin of meat, these proposals are timely, if not overdue.

This is my first Annual Report to the Chairman and members of the Health Committee. It represents in precis form the year's work of a very small section of the staff serving the Local Authority. The work of this section is influenced by, and assisted by other officers of the Corporation to whom my thanks are due. I would like to record my indebtedness to personnel of the Water Undertaking whose co-operation has been highly valued, and to the Public Health Inspectorate for their very willing and helpful co-operation. Lastly but by no means least my indebtedness to the laboratory staff for their loyal service is placed on record.

Total Number of Samples Examined:

The number of samples examined during the year was 5,959 which is very similar to the total number of samples examined in 1961 (5,974).

The samples examined are classified as follows:

FOR THE HEALTH COMMITTEE:

Food and Drugs	1,069
Designated Milks	245
Ice-Creams etc. (bacteriological examination)	52
Rinses from milk bottles and churns	7
Waters from domestic premises	146
Swimming bath waters	131
Fertilisers and Feeding Stuffs	17
Atmospheric Pollution:	•
Smoke and Sulphur Dioxide concentrations	3,003
(samples from Local Authority Testing	2,002
Stations)	
Smoke and Sulphur Dioxide concentrations	
(samples from domestic premises)	60
Polycyclic Hydrocarbons	60
Atmospheric Deposit Samples	6
Miscellaneous examinations	114
FOR THE WATERWORKS COMMITTEE	990
For other Departments, Authorities etc	59
Total	5,959
TOTAL	

Food and Drug Samples:

The number of foods and drugs submitted by the Sampling Officer during the year was 1,069 which is equivalent to a sampling rate of 6.65 per 1,000 of the population.

48 samples were reported as adulterated or otherwise unsatisfactory, a proportion of 4.5 per cent. In 1961 the proportion unsatisfactory was 4.9 and in 1960 4.0 per cent.

In past recent years a significant proportion of the unsatisfactory food samples examined were so classified because of infestation with mites or other insects and rodent excreta etc. The distribution and sale of such infested food appears to have recently been substantially reduced as is shown in the following table:

		PERCENTAGE OF THE
		Unsatisfactory
	Percentage of	Samples due to
	Unsatisfactory	Insect
	Food and Drugs	INFESTATION
1962	4.5	4.2
1961	4.9	38.2
1960	4.0	11.1
1959	6.0	29.0
1958	4.3	62.3
1957	5.0	43.3

Details of the samples submitted under the Food and Drugs Act, during 1962, and of the unsatisfactory samples are given in the following tables.

Milk Samples:

561 samples of milk were analysed during 1962, and of these 10 were classined as adulterated. Details of the latter are given in the list of unsatisfactory samples of Foods and Drugs.

The proportion of adulterated milk samples was 1.8 per cent which was only approximately half of the proportion of adulterated samples reported in 1961 (3.5 per cent).

The following table shows the average composition of all the milks examined during each quarter, and the yearly average composition. These averages exclude Channel Island milk.

	No. of Samples	Fat %	Solids-not-fat %	Water %
1st Quarter, 1962	143	3.65	8.75	87.60
2nd ,, ,,	129	3.64	8.78	87.58
3rd ,, ,,	133	3.80	8.85	87.35
4th ,, ,,	151	3.85	8.87	87.28
For the year 1962	556	3.74	8.81	87.45
For the year 1961	498	3.65	8.80	87.55
For the year 1960	676	3.62	8.80	87.55

Designated Milks:

In addition to chemical analysis, designated milks are subjected to tests which are specified in The Milk (Special Designation) Regulations, 1960.

These tests include the Methylene Blue Test which is a measure of the keeping quality of the milk; the Phosphatase test which is a check on the efficiency of the Pasteurisation process; and the Turbidity test which functions as a check on the heat treatment given to Sterilised Milk.

Examination of Designated Milks

Designation	No. Satis- Examined factory		Failed Meth. Blue Test	Failed Phos. Test	Failed Turbidity Test	Test Void
Pasteurised	103	103	o	0		0
T.T. Pasteurised	28	27	1	0	-	0
Sterilised	102	102	-	-	0	-
T.T. Farm Bottled	12	12	0	-	_	0
Totals	245	244	1	0	0	0

The above samples included 48 samples of Pasteurised Milk taken from the supplies to local schools. The results obtained are very satisfactory. In only one instance the methylene blue test showed the milk to be unsatisfactory. In addition one sample of Tuberculin Tested Pasteurised Milk and one sample of Sterilised Milk were found to be deficient in fat.

Ice Cream Samples:

These samples are collected in sterile containers, special precautions being taken to preclude contamination occurring during sampling; they are then subjected to a Methylene Blue test in order to assess their relative hygienic qualities. Under the conditions of the test, samples which decolourise the Methylene Blue solution in $4\frac{1}{2}$ hours or more are classified as Grade 1; those which decolourise the solution in $2\frac{1}{2}$ to 4 hours as Grade 2; in $\frac{1}{2}$ to 2 hours as Grade 3; and those decolourising the solution instantly (0 hours) as Grade 4.

Samples categorised as Grade 3 or 4 are classified as of an unsatisfactory standard.

The samples are also examined for organisms of intestinal origin, the presence of which is regarded as evidence of undesirable contamination.

Methylene Blue Test for Ice Creams

				Bolton Manufacturers		Other Manufactures	
				Wrapped Ice Cream		Wrapped Ice Cream	Loose Ice Cream
,,	,,	s of Grade 1: ,, Grade 2 ,, Grade 3	standard ,,	 1 - 1	11 9 4	11 2 1	1 - -
"	,,	" Grade 4	,,	 _	11	0	_
			Totals	 2	35	14	1

Sixteen of the thirty seven samples of locally produced ice cream were classified as unsatisfactory in having unsatisfactory methylene blue gradings. Three of these were additionally unsatisfactory in containing organisms of intestinal origin. Three of the samples which gave satisfactory methylene blue gradings were also unsatisfactory by virtue of their containing organisms of excremental origin. No less than 19 of the 37 samples of locally produced ice cream were classified as unsatisfactory. That more than half of the local products were so classified is not a very satisfactory state of affairs. It does in fact represent a slight improvement on the results obtained during 1961 when no less than 29 out of 42 samples of locally produced ice cream were classified as being of an unsatisfactory standard of hygienic quality.

Only one out of the fifteen samples of ice cream sold in Bolton but produced by outside manufacturers failed to be given a satisfactory hygienic quality grading.

Domestic Water Supplies:

The established procedure of examining samples of water collected at domestic premises in various parts of the town and district was continued throughout 1962. These supplement the information collected by the examination of samples taken at the filter stations for the Waterworks Department, and provide tor assessment of water quality as it reaches the consumer. Of the one hundred and forty six samples of this type examined in only four instances were slight traces of bacteriological impurity present. In no case was this contamination of a serious nature, and subsequent sampling in every case yielded results indicating water of a very high standard of bacteriological quality.

Swimming Bath Waters:

Systematic water treatment is constantly required to control the quality of the water in the plunges at each of the public swimming baths. Such treatment includes filtration, chlorination and controlled alkali addition. Regular analysis to assess the efficiency of these processes has been carried out to supplement the tests performed by the Manager of each bath. Similar analyses are carried out on samples of water from swimming baths at local schools. These analyses, which include bacteriological analyses, show that high quality standard has been maintained.

Fertilisers and Feeding Stuffs:

17 Fertilisers and Feeding Stuffs have been analysed.

The following samples were shown by analyses not to agree with the particulars on the Statutory Statements:

Sulphate of Ammonia: Contained an excess of free sulphuric acid.

Superphosphate Powder: Deficient in soluble phosphate.

Ground North African Statutory Statement incorrect in indicating content Phosphate: Statutory Statement incorrect in indicating content of phosphoric acid as being soluble instead of in-

soluble in water. The amount passing through the

prescribed sieve was not stated.

The remainder of the samples agreed substantially with the analysis on the Statutory Statements, having regard to the prescribed limits of variation.

Atmospheric Pollution:

At times in this part of the country it is readily apparent, without resort to the use of measuring instruments, that the local population are subjected to an undesirable degree of fouling of the air.

However, it is as a direct consequence of the instrumentation installed some years ago that the pattern and trends of local atmospheric pollution can be critically followed. This provides for an assessment to be made of any improvements consequent upon the implementation of the Clean Air Act in parts of the Borough.

The instruments which provide for these measurements are installed at nine selected sites in a grid across the town. Daily determinations of the amounts of smoke and sulphur dioxide are carried out, and the smoke collected at five of these sites is analysed each month for the concentration of certain polycyclic hydrocarbons (3:4 Benzpyrene, 1:12 Benzperylene and Pyrene).

It is with pleasure that I record in this report that the level of atmospheric smoke in the Borough again decreased in 1962, and decreased by quite a significant amount.

The results obtained during the year are recorded on the appended tables.

From these tables it may be seen that there has been a reduction in smoke concentration at all of the sites. The daily average for the whole year of all the sites was 196 micrograms per cubic metre compared with 243 micrograms for the previous year. This amounts to a reduction of almost one fifth (19.3 per cent), and compares very favourably with the reduction of 15.6 per cent achieved the previous year.

The highest results have again been recorded at Astley Street and the lowest results at Lostock.

Fundamental considerations show that progressive substantial reductions in the amount of sulphur dioxide cannot be anticipated. During the past three years the average level of sulphur dioxide has remained fairly steady at 219, 218 and 221 micrograms per cubic metre. This is very substantially less than that recorded in 1959 when the average level of sulphur dioxide was 288 micrograms per cubic metre.

Certain anomalous results were obtained for the atmospheric pollution levels in December, 1962 which affected the recovery of polynuclear hydrocarbons from the smoke. These affect but slightly the overall pattern of results for the year which show a definite reduction in the levels of 3:4 Benzpyrene and 1:12 Benzperylene. The level of Pyrene remained substantially similar to the results obtained over the previous two years. The amount of Pyrene present was only two thirds of the amount recorded in 1959.

These reductions in hydrocarbons relate to the concentrations in micrograms per 100 cubic metres of air. As there has been a very significant reduction in the total amount of smoke in the atmosphere, the tables showing the concentrations of hydrocarbons expressed as parts per million of the smoke show slight increases.

A commencement was made on comparative determinations of smoke and sulphur dioxide inside and outside dwelling houses burning smokeless fuel. The preliminary results obtained show particularly significant lower levels of smoke and sulphur dioxide inside the dwelling as compared with the air immediately outside the premises. This work is to be continued in 1963.

The very significant reduction in the overall levels of atmospheric pollution during the summer months is again clearly demonstrated in the tabulated data.

Miscelianeous Examinations:

The general public have inevitably had many things to complain about in 1962 besides the weather. Some of their interesting complaints found their way via the public health inspectors to the laboratory. This miscellany of samples included the following:

MOULDY FOOD

The following articles of food were all contaminated to varying degrees with fungal growths:

Bread and butter, black pudding (£5 fine, £7 7s. costs), cottage cheese, cream cake (£20 fine, £4 4s. costs), crumpets (£20 fine £4 4s. costs), malted milk, meat pie and Swiss roll. Contamination in each case was with common moulds.

BREAD

A miscellany of "foreign" matter was found in complaint samples of bread. These undesirable inclusions included, sheared off metal pieces from bakehouse machinery (£10 fine, £7 7s. costs), mineral oil and graphite, embedded copper wire (£15 fine, £5 5s. costs), oily rag (£10 fine, £.5 5s. costs), blue cardboard, oil and grease, dust particles and cast cuticles of an insect.

INSECTS

A golden spider beetle was found in an iced bun, a humble bee in jam, parts of a roach in a meat and potato pie (referred for legal proceedings), a beetle in a fruit tart, and a Mediterranean flour moth reported found in a bag of sugar.

MISCELLANEOUS

Butter submitted contained the kernel of a nut, meat Contamination: contained grit and sawdust, (£20 fine, £7 7s. costs), jute from sacking was present in a meat pie (£10 fine, £5 5s. costs), pigs hairs were found in a black pudding (£20 fine, £7 7s. costs), a piece of wood was present in a gooseberry tart, a piece of root from a potato plant was found in a meat and potato pie, a brass screw found in a meat and potato pasty (£10 fine, £7 7s. costs), rust particles were present in a pork pie, a human hair was found in a pork pie, string over ten inches in length was found in a steak and kidney pie (f.12 fine, f.5 5s. costs), a sample of milk contained sterilising agent (hypochlorite), and some glacé pineapple contained dirty cotton fibres, dust and dirt, which were firmly embedded in the fruit and well covered with sugar. Gross metallic contamination was present in a severely corroded can of corned beef.

WATER SAMPLES

Miscellaneous water samples included water and sludge from a paddling pool, water from caravan sites, complaints of temporary discolouration, water percolations through brickwork and sub-floor waters examined in the investigation of suspected leakage from sewers or water mains.

Samples found Satisfactory:

By no means all of the complaints submitted to the laboratory were justified as such, although the majority necessitated careful investigation to elucidate alleged shortcomings. The following samples were found to be satisfactory: milk, cheese, drinking straws, alleged poisoned bread, spice, cooked poultry, bread containing a current, lemon squash, baby food, dessicated coconut, flat cake, porridge oats, custard tart, rye meal, canned luncheon meat and canned hot pot. A white loaf contained speckles of brown wholemeal flour which detracted considerably from its appearance but was perfectly wholesome and tinned salmon thought to contain many pieces of broken glass contained not glass but struvite crystals, of natural occurrence, which are found from time to time in canned fish.

Additional Miscellaneous Examinations

Somewhat unusual samples found their way to the laboratory via a local shopkeeper in the form of meat tenderisers. These had been sent as a gift from abroad with a view to their like being imported for local sale. These mixtures were alleged to contain the enzyme papain (obtained from species of tropical fruit), and should have functioned to make tender, tough meat steaks. The samples were found to be totally devoid of enzyme activity and were thus valueless for the purpose intended.

Other miscellaneous examinations included samples analysed in the investigation of abnormal smears on a shop window, foundry dust for assay, soot samples with reference to ignition temperatures and acid content, cellulose wadding, ammonium sulphate, sodium hypochlorite antifreeze, insecticide for analysis, and creams for bacteriological examination.

FOR THE EDUCATION DEPARTMENT AND BOLTON SCHOOL:

FOR THE BOROUGH ARCHITECT:

FOR THE CHIEF FIRE OFFICER:

FOR THE ESTATES DEPARTMENT:

FOR ATHERTON U.D.C.:

FOR HORWICH U.D.C.:

FOR WORSLEY U.D.C.: FOR PRIVATE SOURCES:

40 Swimming Bath Waters.

1 water, 1 material for identity check.

2 samples re The Petroleum (Regulation) Act, 1928.

4 Drinking Waters

3 Waters and 2 solutions of hydroggen peroxide.

1 Water

2 Tins of Fruit Cocktail

3 Chemical Solvents.

Waterworks Committee:

An important function of the laboratories is to conduct chemical and bacteriological analyses of water samples for the Waterworks Committee.

Water samples representative of water from the reservoirs and samples subsequent to filtration and chemical treatment are collected weekly from each filter station. The regular check analyses include tests for plumbo solvency, pH value, colour, residual chlorine etc. and each sample collected is examined bacteriologically. At quarterly intervals samples from the same sources are subjected to full chemical analysis.

During the year, work on the new treatment works at Wayoh was completed. This provides for chemical treatment in upward flow sedimentation tanks in addition to filtration and chlorination.

Typical results on the filtered water from the three main filter stations supplying water during the year are given in the following table.

			Springs Pressure Filters	Sweetloves Rapid Gravity Filters	Ferns Park Pressure Filters
CHEMICAL		p.p.			
Total Solids		million	69	75	89
Eman Amamania	• •	do.	nil	0.01	0.01
Albuminoid Ammonia	• •	do.	0.01	0.03	0.04
NT'. NT'.	• •	do.	0.13	0.26	0.16
Nitrate Nitrogen	• •	do.	nil	nil	nil
Chlorides	• •	do.	14	15	17
Oxygen absorbed in 4 hours		do.	0.20	0.30	0.35
Suspended Matter		ao.	none	none	none
Odour			none	none	none
Total Hardness		do.	25	30	40
Hazen Number		uo.	<5	< 5°	<5
Plumbo-solvency (24 hours)		do.	0.4	0.4	0.2
pH value		do.	7.1	7.9	6.7
Iron (as Fe)		do.	nil	0.02	nil
Aluminium (as Al)		do.	0.15	0.10	0.05
Manganese (as Mn)		do.	0.30	0.30	0.15
Free residual chlorine		do.	0.05	0.15	0.07
Total residual chlorine		do.	0.08	0.25	0.15
Total residual emornic	• •	do.	0.00	0.23	0.15
BACTERIOLOGICAL					
No. of colonies growing on Ag	ar at 37	°C per m1	0		3
No. of coliform organisms per			ő	ò	ő
Type of B. Coli			_	_	_
Clostridium Welchii in 50 mls.			negative	negative	negative
					and Burney of

TABLE A
Samples of Food and Drugs Examined

	,		1
Article	Total	Genuine	Adulterated or otherwise unsatisfactory
Milk	561	551	10
Almonds, Ground	i	i	10
Arrowroot	3	3	
Beef, Jellied	ĺ	ĭ	
Beetroot, Pickled	2	i	1
Black Puddings	$\frac{1}{3}$	j j	1
Bon-Bons	ĺ	ĭ	
Brawn	3	3	
Butter	15	15	
Cake Decorations	7	7	
Cake Mix	7	7	
Cereals and Pulses	65	62	3
Cheese	4	4	3
Cherries, Glacé	3	2	1
Chicken in Jelly	ı	0	1
Chicken in Jelly	2	2	1
Chop-Suey	1		
Cockles	2	1	
Cocoa		2	
Coconut Desiccated	4	4	
Coffee, Dry Extract	6	6	
Coffee & Chicory Essence	4	4	
Cream	6	6	
Dates	3	3	
Diabetic Foods	6	6	
Eggs, Frozen	5	5	
Figs	2	2	
Fish, Canned	8	8	
Fish, Pastes & Spreads	10	10	
Flour	10	10	
Food Colours	3	3	
Food Flavours	4	4	
Fruit, Canned	10	10	
Fruit Curd	5	4	1
Fruit, Dried	12	12	
Fruit, Dried Mixed	3	0	3
Fruit Juice	2	2	
Gelatine	4	4	
Gin	10	10	
Gin	5	5	
Gum, Bubble & Chewirg	6	6	
Hamburgers		3	1
Honey	6	6	•
Hors D'Oeuvres	ĬĬ	ĭ	
Jam	8	7	1
Jelly	6	5	1
Margarine	4	4	1
Marmalade	3	3	
Marzipan	3	3	
14 D .	3 4	4	
17 75 1	2	0	2
M . D I . C I	2 9	5	4
	4	4	**
	6	6	
	3	3	
	3	3	
Nutmeg, Ground	3	3 5	1
Nuts	6	5 8	1
Oils, Cooking	8 6		
Pasta	0	6	

	1	1	1
Article	Total	Genuine	Adulterated or otherwise unsatisfactory
Parsley Sauce Mix	1	1	_
Peanut Butter	1	1	_
Peel, Cut Mixed	5	2	3
Peas, Canned	6	6	
Pickles, Mixed	4	2	$\frac{1}{2}$
Potato, Dehydrated	2	2	_
Potato Puffs	2 2	2 2 2	_
Pudding, Christmas Plum	3	1	2
Pudding, Canned Rice	4	4	_
Pudding, Canned Sago	1	1	_
Salad Cream	4	4	_
Salad Mixed	1	1	_
Sauce, Tomato	6	6	_
Soft Drinks	9	9	_
Spices	12	12	_
Stuffing	1	1	_
Suet, Shredded	3	3	_
Sugar Confectionery	12	12	_
Tea	5	5	_
Vegetable, Oriental Canned	1	i	_
Vinegar, Malt	2	i	1
Walnuts, Pickled	l ī	ĺ	_
Whisky	4	4	_
Wine	2	2	_
Alum	4	4	_
Ascorbic Acid Tablets	5	5	_
Aspirin Tablets	12	12	_
Bronchial Mixture	1	1	_
Chlorophyll Tablets	1	1	_
Distilled Water	3	3	_
Female Pills	1	1	-
Halibut Liver Oil Capsules	6	4	2
Hydrogen Peroxide Solution	5	4	1
Liquorice Liquid Extract	4	3	1
Magnesia Mixtures	3	3	_
Magnesium Trisilicate	3	3	_
Nerve Tonics	4	3	1
Parrish's Food	1	1	-
Raspberry Leaf Tablets	1	1	_
Rasberry Vinegar	3	2	1
Saccharin Tablets	4	4	_
Senna Pods	1	1	_
Sleeping Tablets Herbal	1	1	_
Slimming Preparations	3	1 .	2
Teething Preparations	4	3	1
Vitamin C Drinks	6	5	1
Yeast Tablets	5	5	-
Тотаг	1,069	1,021	48

TABLE B

Unsatisfactory Samples of Foods and Drugs

(1) Unsatisfactory Foods

MILK: Ten samples were reported as adulterated. In each case the sample

contained less than the minimum of 3 per cent of fat, the deficiencies varied between 1.0 and 5.3 per cent. In 8 of the 10 cases although the individual samples were deficient the consignment of which they formed a part had in each case a fat content which exceeded 3 per cent. In the other two cases of fat deficiency subsequent sampling resulted

in satisfactory findings.

RICE: Two samples were contaminated with rodent excreta and were unfit

for human consumption. Stock surrendered and destroyed by in-

cineration.

CEREALS AND PULSES

MIXTURE:

This consisted of a mixture of barley, lentils, whole and split peas, rice and tapioca. Large numbers of dead mites were present; no living mites were detected. The sample was unfit for human con-

sumption. Stock surrendered and destroyed by incineration.

Jam: Contaminated with mould growth. Remainder of stock examined;

no other contaminated samples.

WALNUTS: Contaminated with insect webbing and dead mites; no living mites

were detected. The sample was unfit for human consumption. Stock

surrendered and destroyed.

CHOPPED CHICKEN IN

JELLY:

Contained 61 per cent of chicken instead of not less than 70 per cent.

Warning letter sent to manufacturer.

HAMBURGER: Contained only 31 per cent of meat and was devoid of lean meat;

the sample should have contained not less than 75 per cent of meat, including not less than 37.5 per cent of lean meat. Subsequent samples had a high protein content much of which was due to the inclusion

of gristle.

JELLY: Did not comply with the setting test prescribed in The Food Standard (Table Jellie) Order. The jelly was from all steel which was

dards (Table Jellies) Order. The jelly was from old stock which was

taken off sale.

POTTED MEAT: Two samples were unsatisfactory. These contained 84.5 per cent

meat and 91 per cent meat instead of not less than 95 per cent meat.

Manufacturers interviewed and cautioned.

MALT VINEGAR: The sample consisted of non-brewed condiment. Vendor cautioned.

FRUIT CURD: This sample of Lemon Cheese was not labelled in accordance with the

Labelling of Food Order, 1953. A revised label submitted by the

manufacturer was approved.

MEAT PRODUCTS

(CANNED):

Four samples. Three of these showed deficiencies of 8.2, 8.4 and 14.2 per cent of meat as evaluated according to the standards recommended in the Food Standards Committee Report, 1962. Letters sent to

manufacturers.

One sample although compositionally satisfactory did not comply with the requirements of the Labelling of Food Order (1953). A revised label supplied by the manufacturers was regarded as satis-

factory.

DRIED FRUIT MIXTURE:

Three samples. One sample did not list the ingredients and two samples were compositionally not in accord with the ingredients disclosed on the label, contrary to the requirements of the Labelling of Food Order (1953). Revised labelling to include list of ingredients was agreed by one manufacturer. In one case the stock was withdrawn

from sale and in the third case the packer was cautioned.

MIXED PICKLES:

Two samples contravened the requirements of the Labelling of Food Order (1953) in that the composition of the samples was not in accord with the ingredients listed on the label. Cautionary letters were sent to the packers of these products.

PICKLED BEETROOT:

Artificial colouring matter was included in the listed ingredients present in the sample but analysis showed no artificial colouring matter to be present. No action was recommended in this case.

CHRISTMAS PUDDINGS: Two samples contained 5.87 and 6.03 per cent fat respectively. In my opinion the fat content should not be less than 9.0 per cent. These samples were 34.8 and 33.0 per cent deficient in fat. Letters sent to manufacturers.

CUT MIXED PEEL:

Three samples were unsatisfactory. One was partly fermented and contained 0.42 per cent alcohol by weight. The manufacturer's representatives were interviewed. Another contained only 58 per cent soluble solids instead of not less than 64 per cent. The importation of this was discontinued.

A third sample contained a miscellany of foreign matter, including chips of wood, paper, lentils and a grain of barley. Legal action not proceeded with; manufacturers cautioned.

GLACE CHERRIFS:

Glucose listed on the label had not been used as an ingredient. A type of hydrolysed starch (liquid glucose of commerce) was present. The manufacturer agreed to rectify the disclosure of the ingredients in the labelling of this product.

(2) Unsatisfactory Drugs

HYDROGEN PEROXIDE SOLUTION:

This sample did not comply with the British Pharmacopoeia limit for acidity. Vendor notified.

LIQUID EXTRACT OF LIQUORICE:

The sample was deficient in total solids, alcohol and specific gravity as adjudged by the standard for this compound in the British Pharmacopoeia. Manufacturer cautioned.

SLIMMING PREPARATIONS: Two samples. One of these was deficient in protein to the extent of 27%. Manufacturer amended label to indicate correct protein content.

One product was essentially a laxative and contained no specific for the treatment of obesity. Distributing agency cautioned.

HALIBUT LIVER OIL CAPSULES B.P.:

Two samples. One sample was not labelled in accordance with the requirements of the B.P. 1958, Addendum, 1960.

One sample was deficient in Vitamin A to the extent of 37.5 per cent. The sample was from an aged stock. The vendor was cautioned. This matter was brought to the attention of the Secretary of the Bolton Branch of the Pharmaceutical Association.

TEETHING POWDERS:

Compositionally satisfactory but the weight variation (up to 17.5 per cent excess) was regarded as unsatisfactory. Manufacturers cautioned.

BLACKCURRANT

Contained the requisite amount of Vitamin C. A "sleep-inducing" VITIMAN C DRINK: claim on the label was regarded as misleading. Manufacturer caution-

NERVE TONIC:

Tablets in which the excipient (lactose) contained impurities such that the content of the so called "active ingredients" was enhanced. The manufacturer's attention was drawn to a 13.8 per cent excess of potassium in this preparation.

RASPBERRY VINEGAR:

This was labelled as a drug product but the active ingredients present were not disclosed on the label in accordance with the requirements of the Pharmacy and Medicines Act, 1941. Manufacturer agreed to amend label.

Atmospheric Pollution
Smoke—Daily Averages
(micrograms per cubic metre of air)

						4				/						
												Ü	Daily average of	age cf	each site for	te for
Site	Jan.	Feb.	Mar.	Apl.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1962	1961	1960	1959
1 Boot Lane	267	149	278	113	98	59	61	49	86	179	229	250	152	187	225	218
2 Astley Street	515	310	388	256	203	121	111	145	232	353	440	405	290	344	466	498
3 Tonge Moor	325	187	281	152	119	78	64	95	154	231	285	190	180	237	270	273
4 Lostock Open Air School	263	112	191	83	58	90	40	43	82	154	206	243	127	158	167	174
5 Central Police Office	368	176	263	127	86	99	61	77	136	186	299	338	183	506	246	211
6 Withins Clinic	371	195	270	136	105	75	09	98	137	218	276	292	185	241	268	267
7 Lock Lane	314	162	271	124	87	71	57	99	123	212	772	306	173	234	258	258
8 Grecian Mill	635	292	364	196	150	107	94	106	176	282	373	411	263	323	357	366
9 Darcy Lever	395	207	300	156	117	68	75	911	157	244	314	332	209	254	272	270
Daily average (each month) of all sites, 1962	384	196	290	149	115	80	69	87	144	229	300	307	196			
., 1961	448	316	772	236	149	76	77	88	154	247	327	498		243		
1960	450	400	270	250	180	08	110	150	210	320	390	999			281	
1959	640	420	320	230	170	110	06	06	230	300	420	370				282

Atmospheric Pollution Sulphur Dioxide—Daily Averages (Micrograms per cubic metre of air)

				5	1901711	d cum		(micrograms per cuere mene or an)	3	/*-						
													Daily average of each site for	erage of	f each s	ite for
Site	Jan.	Feb.	Mar.	Apl.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1962	1961	1960	1959
Boot Lane	263	145	307	139	138	119	Ξ	77	125	230	271	309	186	181	180	209
2 Astley Street	447	274	376	245	215	180	150	145	219	317	419	457	287	279	343	398
Tonge Moor	204	130	227	139	141	122	93	94	123	179	217	136	150	691	177	229
4 Lostock Open Air School	326	159	257	130	127	115	95	72	1117	199	248	338	182	177	991	681
5 Central Police Office	481	250	393	220	197	164	149	129	204	272	350	437	271	279	263	552
6 Withins Clinic	314	184	293	150	159	144	105	107	153	224	281	358	206	204	186	212
7 Lock Lane	280	151	304	147	138	128	108	83	128	211	277	385	195	201	192	220
Grecian Mill	449	247	428	221	661	162	154	120	186	310	403	467	279	268	289	358
9 Darcy Lever	327	212	294	167	163	147	114	147	159	223	302	345	217	207	197	229
Daily average (each month) of all sites, 1962	343	195	320	173	164	142	120	108	157	241	308	359	219			
1961	322	246	224	214	157	110	92	103	136	187	287	542		218		
1960	337	303	240	212	177	120	100	137	154	217	275	380			221	
1959	644	420	277	240	200	160	152	157	260	289	352	309				288

TABLE E

3:4 Benzpyrene—Monthly Averages (Micrograms per 100 cubic metres of air)

le for	1959	7.5	1.7	2.7	5.1	4.3				4.3
ach site	1960	4.0	<u></u>	2.1	2.4	2.7			5.6	
Average of each site	1961	3.9	1.9	2.1	2.4	3.8		2.8		
Averag	1962	3.4	2.0	2.4	1.9	3.0	2.5			
	Dec.	6.2	12.6	7.3	3.7	7.1	7.4	11.4	10.5	4.1
	Nov.	9.4	3.4	6.4	4.0	3.1	5.0	3.9	8.9	4.7
	Oct.	Ξ	0	2.2	6.0	0	8.0	0.4	2.3	3.1
	Sept.	1.2	9.0	1.2	0	2.1	1.0	0.1	0.5	1.7
	Aug.	9.5	0	0	0.4	0	0.5	0.1	0	9.0
	July	1.0	С	С	0	0	0.2	0	0	6.0
	June	0.5	С	0	0	0	0.1	0.3	0.1	1.0
	May	0	0	0.4	0.7	6.0	0.4		1.0	8.0
	Apl.	2.3	9.0	6.0	1.0	1.7	1.3	2.4	2.1	1.5
	Mar.	2.1	1.0	3.4	1.7	3.7	2.4	5.6	1.8	4.2
	Feb.	4.6	1.2	1.0	2.8	2.1	2.3	4.0	3.7	13.5
	Jan.	12.2	4 · 1	7.5	9.7	15.3	9.3	7.2	5.6	15.3
		:	n Air	Отсе	:	:	of	:	0	:
	Site	2 Astley Street	4 Lostock Open Air School	5 Central Police Office	6 Withins Clinic	8 Grecian Mill	Monthly average of all (5) sites 1962	,, 1961	,, 1960	,, 1959

TABLE F

1:12 Benzperylene-Monthly Averages

				(Micro	(Micrograms per 100 cubic metres of air)	ber :	100 c	ıbic m	etres	of air)						
													Averag	e of ea	Average of each site	for
Site	Jan.	Feb.	Mar.	Apl.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1962	1961	1960	1959
2 Astley Street	17.3	9.01	10.2	9.6	5.8	3.3	2.5	3.5	9.1	7.3	12.7	0	7.7	6.8	11.4	14.4
4 Lostock Open Air School	0.6	2.9	4.2	1.0	8.0	0	0	6.0	2.0	2.5	6.5	0	2.5	5.6	2.7	3.7
5 Central Police Office	13.3	5.1	7.4	1.3	1.2	1.0	0	6.0	2.8	0.5	9.5	13.3	4.7	4.6	5.1	4.0
6 Withins Clinic	9.9	5.9	∞ ∞ ∞	3.3	1.6	9.1	6.0	1.3	4.3	0	2.9	0.2	3.1	5.3	6.1	6.4
8 Grecian Mill	10.7	9.6	7.9	3.4	3.7	2.8	1.7	1.8	4.7	1.4	12.4	14.7	6.2	5.7	7.2	8.4
Monthly average of all (5) sites 1962	11.4	8.9	7.7	3.7	2.6	1.7	1.0	1.7	4.6	2.3	& &	5.6	4.8			
., 1961	0.6	7.4	7.2	4.7	2.8	<u>-</u>	1.3	6.0	2.7	5.7	0.6	13 · 1		5.4		
., 1960	7.9	12.3	5.5	7 · 1	3.6	1.3	2.1	1.5	5.8	8.5	8.5	13.6			6.5	
1959	24.7	12.9	6.3	2.9	3.0	0.8	1.2	1.3	4.5	9.9	11.5	9.6				7.4

TABLE G

Pyrene-Monthly Averages

(Micrograms per 100 cubic metres of air)

					0											
													Averag	e of ea	Average of each site	for
Site	Jan.	Feb.	Mar.	Apl.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1962	1961	1960	1959
2 Astley Street	12.1	5.4	2.2	2.0	0.1	0.2	0.3	0	0.2	1.4	7.3	0.2	2.6	2.7	2.7	7.5
4 Lostock Open Air School	6.7	2.1	2.7	9.0	0	0	0.1	0.2	0.3	0.1	2.4	4 · 1	1.6	1.2	1.3	Ξ
5 Central Police Office	7.7	8.0	2.5	0.4	0.3	0.2	0.2	0.2	0	0.3	2.7	4 3	1.6	1.5	4 - 1	8
6 Withins Clinic	4.2	2.3	2.7	6.0	0.3	0.1	0	0	0	0.5	4.1	4.3	1.6		2.6	2.9
8 Grecian Mill	6.01	2.0	2.3	6.0	8.0	•	0 · 1	0	0	9.0	4.7	0.8	2.5	2.3	2.6	2.0
Monthly average of all (5) sites 1962	& £.	2.5	2.5	1.0	0.3	0 · 1	0 · 1	0.1	0 · 1	9.0	4.2	4.2	2.0			
., 1961	5.8	2.3	2.1	0.4	0.4	0.1	0 · 1	90.0	0.15	0.5	2.2	9.8		1.9		
1960	2.9	4.7	1.4	1.2	9.0	0.3	0.2	0.1	1.0	1.6	4.1	6.9			2.1	
1959	14.6	5.5	3.8	1.8	9.0	0.3	0.5	0.3	0.7	1.6	2.9	4.2				3.1

TABLE H

3:4 Benzpyrene-Monthly Averages

	for	1959	118	88	105	143	95				110
	Average of each site for	1960	89	77	65	62	53			65	
	e of ea	1961	78	85	99	73	06		77		
	Averag	1962	96	94	91	77	79	87			
©		Dec.	153	520	217	128	174	238	221	185	92
smok		Nov.	214	163	163	145	83	154	110	156	96
(Concentration expressed as parts per million of the smoke)		Oct.	32	0	119	42	0	39	18	92	83
nillion		Sept.	52	89	87	0	120	65	9	15	72
s per r		Aug.	35	0	0	50	0	17	20	0	52
s part		July	68	0	0	0	0	18	0	0	109
essed a		June	42	0	0	0	0	œ	22	14	93
cxpr		May	0	0	41	70	09	34	99	63	45
ıtratioı		Apl.	8	19	73	7.1	68	78	100	78	64
Concer		Mar.	53	55	127	63	103	80	91	58	68
)		Feb.	149	103	59	143	80	107	116	71	296
		Jan.	237	154	202	206	242	208	155	64	231
		Site	2 Astiey Street	4 Lostock Open Air School	5 Central Police Office	6 Withins Clinic	8 Grecian Mill	Monthly average of all (5) sites 1962	., 1961	1960	1959

TABLE I

1:12 Benzperylene-Monthly Averages

(Concentration expressed as parts per million of the smoke)

					,											1
													Averag	e of e	Average of each site	for
	Jan.	Feb.	Mar.	Apl.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1962	1961	1960	1959
	336	343	263	375	284	273	230	239	393	207	288	0	269	228	232	244
	341	257	218	103	137	0	0	202	246	159	315	0	165	151	151	157
	360	290	282	100	125	155	0	120	500	29	316	394	198	195	172	154
	178	304	325	243	148	208	155	154	314	0	104	7	178	192	221	212
	168	367	218	172	246	265	178	169	266	49	332	357	232	166	204	197
	277	312	261	199	188	180	113	177	286	68	271	152	209			
	187	215	250	186	156	109	151	88	173	206	270	249		187		
	157	275	182	226	162	135	164	116	247	257	204	226			196	
	351	280	179	227	168	7.1	68	136	164	194	240	217				193
1																

TABLE

Atmospheric Pollution

Pyrene—Monthly Averages (Concentration expressed as parts per million of the smoke)

1	for	1959	66	63	61	85	44				70
	ich site	1960	48	64	41	92	52			56	
	Average of each site	1961	55	57	43	57	47		52		
	Averag	1962	29	88	62	62	64	69			
		Dec.	4	167	126	147	194	128	158	120	106
		Nov.	166	115	91	149	127	130	99	86	99
		Oct.	40	00	14	21	20	21	19	52	47
		Sept.	7	42	0	0	0	10	12	48	31
		Aug.	0	39	28	0	0	13	7	5	40
		July	30	25	37	0	Ξ	21	35	21	20
		June	18	0	33	13	3	13	6	33	25
		May	3	9	25	26	50	22	24	35	47
		Apl.	78	75	32	99	47	09	81	46	67
		Mar.	56	142	16	86	62	91	11	44	104
		Feb.	172	185	47	116	77	119	92	115	114
		Jan.	234	254	209	113	171	196	125	54	186
		Site	2 Astley Street	4 Lostock Open Air School	5 Central Police Office	6 Withins Clinic	8 Grecian Mill	Monthly average of all (5) sites 1962	1961	1960	1959
1			2 Astle	4 Losto Sch	5 Cent	6 With	8 Grec	Month (5) si	33	33	33

PART V

ADDITIONAL INFORMATION

Medical Examination of Corporation Employees
National Assistance Act, 1948 - Section 47
Persons in need of Care and Attention
The Incidence of Blindness, Epilepsy and Cerebral Palsy
Work done on behalf of the Children's Committee
Co-ordinating Committee - Problem Families
Nursing Homes
Cremation
Rehousing on General Medical Grounds
Baths and Wash-houses
Meteorological Summary

MEDICAL EXAMINATION OF CORPORATION EMPLOYEES

During the year, 1,524 examinations were carried out involving 1,512 persons. A summary of these is shown in the following table:

		persons nined	No. of persons found unfit		
Examination for—	Males	Females	Males	Females	
Entry into Superannuation Scheme	403	166	2	3	
Entry into Sickness Payment Scheme	149	272	-	13	
Other medicals, e.g., Fitness to resume employment	13	5	-	_	
Retirement on medical grounds	9	3	-	_	
Surrender of part pension	1	-	-	_	
Fitness to be employed as a teacher	85	93	1	_	
Fitness for admission to a Training College	42	75	-	_	
Fitness to teach after leaving the Bolton Technical Training College	158	21	-	-	
Medical examinations carried out at the request of other Local Authorities	12	5	-		
Totals	872	640	3	16	

Of the above, there were fourteen incomplete examinations, i.e. where it was found that a decision had to be deferred and the persons concerned were requested to attend for a further medical examination. Five persons resigned before a further examination was carried out.

Two hundred and ninety-eight persons were sent to mass radiography units and ten to Bolton Royal Infirmary for chest X-rays when a mass radiography unit was not available. All persons leaving Bolton Technical Training College were sent to the mass radiography unit, and this accounts for one hundred and seventy-nine referrals. One hundred and fifteen persons were sent because their employment involved work with children, ten who were appointed to posts on the nursing staff, and the remainder at the request of the examining medical officer. All students examined in connection with their fitness for admission to training colleges were advised to attend for a chest X-ray and information regarding available mass radiography units was supplied. X-rays were carried out at the request of the following authorities—Dorchester County Council, County Borough of Burton-upon-Trent, Divisional Health Committee at Kirkham. One teacher was subsequently referred to the Chest Clinic after attending a mass radiography unit.

Seven persons were referred to consultants for a further opinion.

Two hundred and twenty-five actual and potential public service vehicle drivers were examined during the year.

Nine drivers attended for medical examination regarding fitness to resume driving after a period of sick leave. One was considered to be unfit but this decision will be reviewed in 1963.

The number of medical examinations carried out again showed a slight fall -1,524 in 1962, compared with 1,695 in 1961 and 1,769 in 1960.

An analysis of the conditions which caused persons examined for entry into the Superannuation and Sickness Payment Schemes to be found unfit is shown in the following table.

	Superannua	tion Scheme	Sickness Payment Scheme			
	Males	Females	Males	Females		
Cardiovascular disease (including hypertension)	-		-	2		
Respiratory System	-	2	-	1		
Hernia	-	-	with	1		
Nervous System	1	1		-		
Varicose Veins	-	-	-	3		
Skin conditions		-	-	2		
Other conditions	1	-	-	4		
Totals	2	3	-	13		

NATIONAL ASSISTANCE ACT, 1948 - SECTION 47 PERSONS IN NEED OF CARE AND ATTENTION

Powers exist under Section 47 of the National Assistance Act, 1948 (as amended) for the compulsory removal of persons in need of care and attention to a hospital or to accommodation provided under Part III of the National Assistance Act. Such action is only taken as a last resort when a person is in an advanced state of neglect, or suffering from grave chronic disease and in great need of institutional care, but is unwilling to go voluntarily.

As in the previous year, it was not necessary to use these powers.

There are a few elderly people living at home in conditions which are unsatisfactory, but who are unwilling to leave their homes. These cases are kept under close supervision by the officers of the department and it is usually possible, in time, to take appropriate action without using compulsory powers.

THE INCIDENCE OF BLINDNESS, EPILEPSY AND CEREBRAL PALSY

Blindness:

The Register of Blind Persons contained the names of 196 men and 265 women at the end of the year.

Twenty-four men and fifty-six women were registered as partially sighted.

The ophthalmic surgeons completed a total of fifty-six forms B.D.8. during the year (25 males; 31 females).

Epilepsy:

The Chief Welfare Officer states that the Register of Handicapped Persons contained the names of twenty-one males and thirteen females suffering from epilepsy. Of these, eleven men and four women were in colonies for the epileptic, two men and two women were in hostels, and eight men and seven women were in their own homes.

The Local Education Authority knew of 53 boys and 30 girls attending ordinary schools who were epileptic, and maintained four girls in special schools for epileptic pupils. In addition, nine boys and three girls were attending other special schools.

Cerebral Palsy:

Only one person suffering from cerebral palsy was on the Register of Handicapped Persons maintained by the Chief Welfare Officer.

The Local Authority were aware of 34 children with this handicap. Disposal of these children is as follows:

	Boys	GIRLS
Attending Birtenshaw Hall Special School	2	7
Awaiting admission to Birtenshaw Hall Special School	_	1
Awaiting admission to Special School for Partially Sighted		
Children	1	_
Attending Special School for Educationally Subnormal children	ł	2
Attending ordinary schools		5
Not at school – pre-school children	8	1
	18	16
	===	

Of the subnormal and severely subnormal persons known to the authority 26 – 11 males and 15 females – were suffering from cerebral palsy in addition to the mental handicap.

Facilities available for Handicapped Persons:

The welfare of handicapped persons over school age is the responsibility of the Welfare Department, and from the age of two years up to school leaving age it is the responsibility of the Education Authority.

Handicraft facilities are provided by the Welfare Department at the Social Centre for Handicapped Persons situate in the Margaret Greg Workshop, Woodlands, Manchester Road, Bolton.

A bus which has been specially adapted for use by handicapped persons has proved very successful.

Difficulty has been experienced in the past two years in finding suitable holiday accommodation for handicapped persons, and it hoped to take a party of between twenty and thirty handicapped persons to Middleton Towers Camp for one week in May, 1963.

WORK DONE ON BEHALF OF THE CHILDREN'S COMMITTEE

As in previous years, the Health Department was responsible for the routine medical supervision of children in the care of the Local Authority. All the children "in care" had routine medical examinations at the intervals laid down by the Home Office Boarding-out Regulations. The medical officer on duty also examined children for £dmission, discharge, or boarding-out.

A medical officer visited the Elizabeth Ashmore Nursery monthly to perform routine examinations, vaccinations against smallpox and poliomyelitis, and immunisations against diphtheria, whooping cough and tetanus. In addition, visits were made to Braxmere and Crompton House by the same medical officer in order to obtain continuity of medical supervision for the older children.

A special report to the Children's Committee was issued quarterly by the Medical Officer of Health. The medical officer allocated to this work attended these meetings to present the report and to comment on any special points and answer any questions from Committee members.

Medical Examinations:

No. of examinations on admission to Homes No. of examinations on discharge from Homes No. of examinations made for the purpose	 100
boarding-out	 66
TOTAL	 636

Nutritional Status:

The nutritional status of all children examined at routine medical examinations was satisfactory.

Classification of Defects needing Treatment found at Routine Medical Examinations:

of	defects	of	Ears											5
,,	,,	,,	Skin											22
,,	22	,,	Chest											2
,,	,,	,,	Eyes											30
,,	,,	"												6
,,	,,			~										5
,,	,,													2
,,	,,													1
,,	,,	,,	Nose an	d Th	roat									9
,,	,,													2
,,	,,					٠								- 1
,,														16
														2
ide	nce of N	Vo	cturnal E	Enure	esis					۰				6
														2
,,	Ricket	S												3
al l	No. of I)ei	fects Asc	ertai	ned:									114
	;; ;; ;; ;; ;; ;; ;; ;; ;; ;; ;; ;; ;;	"" "" "" "" "" "" "" "" "" "" "" "" ""	"" " " " " " " " " " " " " " " " " " "	", ", ", Chest ", ", Eyes ", ", Teeth ", ", ", Genital ", ", Mouth ", ", Nose an ", ", Speech ", ", Abdome ", Psychological defe ", Orthopaedic defe idence of Nocturnal E ", Obesity ", Rickets	"" "" "" Skin "" "" Chest "" "" Eyes "" "" Teeth "" "" Nervous Syst "" "" Mouth "" "" Nose and Th "" "" Speech "" "" Abdomen "" Psychological defects "" Orthopaedic defects "" Orthopaedic defects "" Obesity "" Rickets	"" "" "" Skin "" "" "" "" "" "" "" "" "" "" "" "" ""	"" "" "" Skin "" "" "" Chest "" "" "" Eyes "" "" Teeth "" "" "" Nervous System "" "" "" Mouth "" "" "" Nose and Throat "" "" "" Speech "" "" Abdomen "" "" Abdomen "" Psychological defects "" "" Orthopaedic defects "" Orthopaedic defects "" Obesity "" Rickets	"" "" "" Skin "" "" "" "" "" "" "" "" "" "" "" "" ""	"" "" "" Skin "" "" "" Chest "" "" "" Eyes "" "" "" Teeth "" "" "" Nervous System "" "" "" Mouth "" "" "" Nose and Throat "" "" "" Speech "" "" "" Abdomen "" Psychological defects "" Orthopaedic defects "" Orthopaedic defects "" Obesity "" Rickets	"" "" "" Skin "" "" "" Chest "" "" Eyes "" "" Teeth "" "" Nervous System "" "" Genital System "" "" Mouth "" "" Nose and Throat "" "" Speech "" "" Abdomen "" Psychological defects "" Orthopaedic defects "" Orthopaedic defects "" Obesity "" Rickets	"" "" "" Skin "" "" "" Chest "" "" "" Eyes "" "" Teeth "" "" "Nervous System "" "" " " Mouth "" "" Nose and Throat "" "" " Speech "" "" Abdomen "" Psychological defects "" Orthopaedic defects "" Orthopaedic defects "" Obesity "" Rickets	" " " Skin " " " Chest " " Eyes " " Teeth " " " Nervous System " " " Genital System " " Mouth " " Nose and Throat " " Speech " " Abdomen " Psychological defects " Orthopaedic defects idence of Nocturnal Enuresis " Obesity " Rickets	"" "" "" Skin "" "" "" Chest "" "" "" Eyes "" "" Teeth "" "" "Nervous System "" "" " Mouth "" "" Nose and Throat "" "" " Speech "" "" Abdomen "" Psychological defects "" Orthopaedic defects "" Orthopaedic defects "" "" Rickets	"" "" "" Skin "" "" "" "" Eyes "" "" "" Teeth "" "" "" "" Nervous System "" "" "" Mouth "" "" "" Nose and Throat "" "" "" Speech "" "" "" Abdomen "" Psychological defects "" Orthopaedic defects "" Orthopaedic defects "" Obesity "" Rickets

Each defect noted above was either already being treated or treatment was arranged directly or by referral. Eight children were referred for a specialist opinion.

Nocturnal enuresis or bedwetting was again found to be one of the most distressing defects, and medical attention has been concentrated on treating this, with satisfactory results. Psychological defects, not unnaturally common amongst this group of children, have also received particular attention during the past year with some degree of successful treatment.

CO-ORDINATING COMMITTEE - PROBLEM FAMILIES

Quarterly meetings of this Committee have continued to be held under the chairmanship of the Medical Officer of Health. They are attended by senior officers of each of the departments of the Corporation concerned with the health and welfare of children in their own homes, by the Area Officers of the National Assistance Board, and by representatives of voluntary organisations in the town who are concerned with this problem. These quarterly meetings consider the co-ordination of the services and review the work of the monthly Case Conferences.

I am grateful to Mr. P. E. Varey, Children's Officer, for supplying the following information:

The Case Conferences are held under the chairmanship of the Children's Officer and are attended by officers of Corporation departments, statutory bodies and voluntary organisations most intimately connected with the neglect of children in the town. Wherever it is thought necessary, discussion takes place aimed at safe-guarding the interests of the children and individual members are asked to make their own contribution to the needs of the case.

During the year the Co-ordinating Committee considered a total of 69 families involving 248 children of which 22 families involving 80 children were newly reported cases.

Of the total of 69 families:—

- 15 families (52 children) were considered to have improved or their needs to have been met to such an extent as to justify their deletion from the register.
- 6 families (13 children) were deleted from the register, the children having been received into the care of the Local Authority and there being no apparent likelihood of rehabilitation.
- 5 families (14 children) were deleted from the register, the families having left the area.
- 43 families (169 children) remained on the list. Of these it was felt that at least 11 of the families involving 45 children were considered to be showing encouraging progress. The remaining 32 families are regarded as being in need of continued supervision, their problems being of a chronic nature.

NURSING HOMES

One new nursing home was registered during May, 1962. This brings the total number of nursing homes in the town registered under Section 187 of the Public Health Act, 1936 to three.

The new nursing home has eleven beds.

The other two nursing homes continued to operate satisfactorily on the same basis as in the past. One of these homes has twenty-seven beds and the other has thirty-three beds.

CREMATION

The "Overdale" Crematorium has now completed eight full years of operation. The details are as follows:

Year	Number of Bolton Residents cremated	Cremations of persons from other areas	Total Cremations	Approx. percentage of deceased Bolton Residents who were cremated
1955	659	774	1,433	28%
1956	745	1,041	1,786	34%
1957	807	1,028	1,835	36%
1958	861	1,071	1,932	40%
1959	938	1,223	2,161	44%
1960	948	1,324	2,272	46%
1961	1,074	1,501	2,575	47%
1962	1,174	1,574	2,748	53 ° ₀

REHOUSING ON GENERAL MEDICAL GROUNDS

As in recent years the Housing Committee continued to allocate up to 50 houses for persons recommended for rehousing on medical grounds.

The total number of applications received for rehousing was 327.

Fifty recommendations were made, the reasons being:

Respiratory disease	es	 			 	13
Arthritis		 			 	8
Diseases of heart ar						
Nervous diseases		 			 	1
Leg amputation		 			 	3
Other diseases		 			 	8
Tuberculosis		 			 	9
						_
		Т	OTAI	L	 	50

Reliousing in ground floor accommodation was recommended in 36 cases.

Sixty-four persons already living in Corporation property were recommended for transfer to more suitable accommodation.

In 16 cases the applicants were living in accommodation in slum clearance areas; they will be rehoused when the property is dealt with under the slum clearance scheme.

In 3 cases the houses were dealt with as individual unfit houses and the applicants rehoused. A closing order was made in respect of one house.

Action was taken in several cases through the Chief Public Health Inspector's department to have repairs carried out.

Thirty-seven families were rehoused, 26 being recommended in 1962 and 11 in previous years.

BATHS AND WASH-HOUSES

There was no change in the pattern of administration of the Baths Service The various establishments offered the following facilities:

-						
\mathbf{R}	Δ	1	г	Н	9	٠

: High Street	 1 Plunge 9 Slipper Baths
Bridgeman Street	 2 Plunges 25 Slipper Baths
Moss Street	 2 Plunges 18 Slipper Baths
Hennon Street	 23 Slipper Baths 1 Shower Bath

Rothwell Street 15 Slipper Baths

Great Moor Street Turkish Baths

Wash-houses:

8 Electric Rotary Washing Machines6 Hand-washing Stalls Moss Street

1 Coin-slot Ironing Machine

Rothwell Street ... 12 Electric Rotary Washing Machines18 Hand-washing Stalls

1 Coin-slot Ironing Machine

The attendances at the various establishments during the last three years are compared below:

	Swim	ming Plu	ınges	Slipper Baths			Wash-houses		
	1960	1961	1962	1960	1961	1962	1960	1961	1962
High St. Baths	65,465	51,137	40,371	15,048	14,334	15,884			
Bridgeman St. Baths	130,973	139,479	116,591	35,713	39,327	45,185			
Moss St. Baths and Wash- houses	107,118	113,286	120,697	35,607	35,811	41,564	21,272	23,027	20,732
Hennon St. Baths				20,359	20,568	20,877			
Rothwell St. Wash-houses				17,712	16,951	17,324	37,410	37,280	35,328
TOTALS	303,556	303,902	277,659	124,439	126,991	140,834	58,682	60,307	56,060

TURKISH BATHS:

YEAR		Атт	TENDANCES
1956	 		6,991
1957	 		7,693
1958	 		7,711
1959	 		7,498
1960	 		8,494
1961	 		11,205
1962	 		12,389

BRIDGEMAN STREET BATHS:

The large plunge was closed for two months early in the year for reconstruction of the dressing accommodation and re-decoration.

HIGH STREET BATHS:

The plunge was closed for four months early in the year because of gale damage to the roof of the building.

Moss Street Wash-house:

The wash-house was closed from late January to early March for alteration of the plant lay-out. Three washing machines were replaced by modern end loading machines and ten additional drying racks were installed.

ROTHWELL STREET WASH-HOUSE:

Four washing machines were replaced by modern end loading machines.

ATTENDANCES:

There was a decrease in the attendances at the swimming baths. This was due to the closing of the plunges at Bridgeman Street and High Street Baths during the early part of the year.

The attendances of schoolchildren in organised parties for swimming instruction were:

		BOLTON	LANCASHIRE
		EDUCATION	County
		AUTHORITY	Council
1960	 	 45,350	6,671
1961	 	 51,642	6,522
1962	 	 45,042	4,791

Each year 150 passes which entitle the holders to a year's free swimming are awarded by the Health Committee to schoolchildren who pass the tests of the Bolton Scholarship Scheme for the Encouragement of Swimming. In addition citizens of Bolton who pass the examination for the bronze medallion of the Royal Life Saving Society are also awarded passes which entitle the holders to a year's free swimming. It is pleasing to note that 207 passes were awarded in 1962 compared with 162 passes in 1960 and 1961.

Seventeen swimming clubs took advantage of the facilities for swimming after public hours. In addition to the Bolton Swimming Club and the Bolton Bridgeman Swimming Club, the baths were used by clubs from local industries, youth organisations and schools, a club which specialises in under-water swimming, and two which give swimming instruction to adults.

There was a substantial increase in attendances at the slipper baths. This was again mainly due to the patronage of students from Commonwealth countries who have taken advantage of the bathing facilities since coming to reside temporarily in Bolton. This was particularly noticeable at Bridgeman Street Baths, which are situated close to the Technical College, and where the highest attendances ever were recorded.

The Turkish Baths continued to grow in popularity and attendances were double those of ten years ago.

A Drying Service was instituted at the wash-houses in March. This service enables the patrons to hire extra drying racks and also enables members of the public to dry washing which they have laundered at home. Despite the new service, which was used by 5,081 patrons, and the steady modernisation of the equipment, the attendances at the wash-houses decreased to some extent because of the closing of Moss Street early in the year. With the development of the slum clearance programme there is, however, a tendency for a movement of the population to areas which make it inconvenient to attend the wash-houses.

The coin-slot ironing machines at Moss Street and Rothwell Street were used 41,579 and 60,801 times respectively, a slight decrease on last year's figures.

The Plunge water in all the public baths is supplied from the town's water mains. The holding capacity of all plunges totals 243,072 gallons, details as follows:

				HOLDING				HOLDING
	L	ARGE		CAPACITY	Si	MALI		CAPACITY
	Pı	UNG	E	(Gallons)	PL	UNG	Е	(Gallons)
Bridgeman Street	75′	×	25'	46,875	46′	×	19'	22,444
High Street	75′	\times	26'	61,936				
Moss Street	75′	×	30′	75,337	60′	×	21'	36,480

The treatment of the water in each establishment is by the process of continuous filtration with a four-hour turnover, combined with controlled chlorination, sulphate of alumina, and sodium carbonate. Daily tests of the water are made to ensure that the chlorine content of 0.5 to 1.0 parts per million and pH value of 7.0 to 7.5 is maintained.

Visits to the baths at least once a month, at unspecified times, are made by the staff of the Borough Analyst for the purpose of taking samples of the water for chemical and bacteriological analysis. The water in each of the plunges is examined for pH value, free and total residual chlorine content; also from a bacteriological aspect, the examination includes the number of organisms present in the water and tests for the presence and types of coliform organisms.

The results have shown that all the waters are consistently of the same high standard of purity as the town's water from which the baths are supplied.

METEOROLOGICAL SUMMARY, 1962

Compiled at Hall 1'th'Wood Observatory by Vincent C. Smith, Esq., Curator and Meteorologist

	Date	8 15 29 29 24 21 24 21 26 30 order order	
Wind	Highest Gust in one day m.p.h.	55 8 67 15 45 29 45 29 45 29 24 29 21 26 28 30 26 48 30 out of order out of order	
	Mthly Mileage	5864 6583 4670 14670 1267 3984 4252 3150 3318 3337 3381 1461 4161	4292
	Fog	& +	
	Wet Days	23 16 11 11 10 10 10 10 10 10 10 10 10 10 10	
Monthly	Rainfall Inches	\$ 5.52 \$ 7.58 \$ 7.15 \$ 7.15 \$ 7.03 \$ 7.03	3.79
	Date	5.22 2.23 3.3 2.33 1.7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	
Sunshine	Most in one day Hours	4 × 0 5 5 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	
	Monthly Total Hours	42.6 67.2 114.5 167.3 148.2 179.7 108.7 108.7 108.7 108.7 108.7 108.7 108.7 108.7 108.7 108.7 108.7	106.0
	Date	1, 2, 3, 15,26 15 15 15,26 1, 26 1, 26 2, 7 2,00 2,9	
stremes rature	Lowest	227 227 237 237 237 237 237 237 237 237	
Absolute Extremes of Temperature	Date	24 11 258 258 7 7 7 7 8 8 8 8 8 8 8 15 10 10 10 10 10 10 10 10 10 10 10 10 10	
	Highest F	252 273 273 273 273 273 273 273 273 273 27	
Avge of Max.	& Min. Temp. °F	8888447888448 8446888448888	47
Humid-	ity %	30 21 3 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	82
	1962	January February March April April June July August September October November December	Monthly Averages

Rainfall: Average 1887 to 1962: 45-475 ins. Sunshine: Average 1887 to 1962: 1070·9 hrs.



COUNTY BOROUGH OF BOLTON EDUCATION COMMITTEE



ANNUAL REPORT

OF THE

Principal School Medical Officer

FOR THE YEAR 1962

A. I. ROSS, M.D., D.P.H., Principal School Medical Officer

SCHOOLS SUB-COMMITTEE

Municipal Year 1962-1963

HIS WORSHIP THE MAYOR
(Alderman J. A. Childs, J.P.)

COUNCILLOR G. HASLAM (Chairman)

ALDERMAN C. H. LUCAS (Vice-Chairman)

ALDERMAN MISS H. M. BESWICK, J.P.

COUNCILLOR MRS. D. BERRY

COUNCILLOR MRS. M. GREENHALGH

COUNCILLOR MRS. E. M. RYLEY

COUNCILLOR H. TAYLOR

Councillor F. Wood

REV. N. W. FORD	(Co-opted	Member)
REV. R. D. ST. JOHN SMITH	,,	,,
MISS M. D. HIGGINSON	,,	,,
Mr. A. Howcroft, J.P.	,,	,,
Mr. G. L. Humphrey	,,	,,
Mr. T. WILLIAMS	"	,,

STAFF OF THE SCHOOL HEALTH SERVICE

Dr. A. I. Ross

Deputy Principal School Medical Dr. I. S. Macdonald School Medical Officers Dr. G. G. Galea (Resigned 31.10.62) Dr. Eve M. Mawdsley Dr. Audrey Seddon Dr. Mavis J. Allanson (Part-time) (Part-time) Dr. Dorothy Carlile (Part-time) (Resigned 24.6.62) Dr. A. Hargreaves (Part-time) (Resigned 1.7.62) Dr. Sylvia J. A. Raymond Dr. James T. Carroll (Commenced 6.9.62) Dr. C. O. Lois Holt (Commenced 1.11,62) School Medical Officers worked part-time in both the Maternity and Child Welfare and School Health Services, and were appointed as Assistant Medical Officers of Health and School Medical Officers. Ophthalmic Surgeons Dr. J. Ratcliffe (Part-time) (Deceased 5.8,62) Dr. T. Chadderton Dr. T. Shannon (Part-time) (Part-time) Ear, Nose and Throat Surgeon Mr. G. G. Mowat (Part-time) Principal School Dental Officer . . . Mr. A. E. Shaw

School Dental Officers	Mr. S. J. Bray Mr. M. R. Annis Mr. I. G. Black Mrs. Erika P. Mellakauls Miss Glenys Haworth Mr. W. J. Abbott	(Part-time) (Part-time) (Resigned 1.4.62)
	Mrs. Mary R. McKenna	(Part-time)
Dental Anaesthetist	Dr. Elizabeth Mitchell Mr. T. H. Wignall	(Part-time) (Part-time)
Psychiatrist	Dr. A. Gage	(Part-time)
Educational Psychologist	Mrs. M. A. Spencer	
Clinical Psychologist	Mrs. P. Bunn	(Part-time)

Speech Therapists Mrs. F. Barber
Miss A. M. Kelly (Full-time unt

Miss A. M. Kelly (Full-time until Sept.)
(Part-time from Sept.)

Chiropodist...... Miss Anne C. Drury (Part-time)

Superintendent Nursing Officer . . . Miss E. M. Richardson

Deputy Superintendent Health

Principal School Medical Officer...

Visitor and School Nurse Miss A. M. Fraser

NURSING STAFF

On the 31st December there were 6 full-time School Nurses, and 26 Health Visitors working part-time on School Health and part-time on Maternity and Child Welfare work—the equivalent of 11½ full-time School Nurses.

The Superintendent Nursing Officer supervised the work of the staff and was assisted by the Deputy Superintendent Health Visitor and School Nurse.

DENTAL SURGERY ASSISTANTS

There were 8 dental surgery assistants employed on the 31st December.

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Health Department, Civic Centre, Bolton.

June, 1963

To the Chairman and Members of the Schools Sub-Committee of the Bolton Education Committee.

During the year the health of the school children in Bolton was, in general extremely good. In recent years it has continued to improve as is shown by the further reduction in the work of the minor ailment clinics and the findings at periodical school medical inspection.

The Child Guidance Clinic continued at the Robert Galloway Clinic on the same lines as previously, with Dr. A. Gage, Consultant Child Psychiatrist, attending twice a week. Unfortunately, two sessions a week is most inadequate and the waiting list is increasing steadily. The Regional Hospital Board was made aware of the position before Dr. Gage took up his appointment in 1961, and they will presently be approached again. Unfortunately, there is an extreme shortage of child psychiatrists and although the Regional Hospital Board wish to do everything possible to assist it is unlikely that further sessions will be available for some years.

The Enuresis Clinic has been a success. This was the first full year in which it was held. A considerable number of children have been helped and the work is undoubtedly very well worth while.

The report gives some details of the investigation that has been taking place into the value of the routine medical examination of primary school leavers. A particular assessment has been made in two schools and presently we shall be able to see whether, by omitting this examination and substituting other methods of eliciting the information by questionnaire, etc., it is necessary to continue with this examination.

There was a slight increase of scabies during the year. It is usual for this disease to vary in incidence from time to time.

Miss Drury, the chiropodist, makes some very apposite comments on the footwear worn by teenage girls. Undoubtedly, much foot trouble in later life is due, particularly among girls, to wearing unsatisfactory shoes which are also too small.

This year there has been an appreciable improvement in the number of children with infested heads. A considerable amount of time of the school nurses and assistants is spent in dealing with dirty heads. In these days of general enlightenment one would have thought that parents would have been able to do much more to ensure their children's heads were free from nits.

A full programme of immunisation against the various infectious diseases continues in the schools. During the year, Sabin oral poliomyelitis vaccine was substituted for Salk vaccine which has to be given by injection.

The Chief Dental Officer in his report makes an emphatic plea for the fluoridation of Bolton's water supply. It is hoped that the Health Committee will be pursuing this during 1963 and that its use will be adopted by the Council. It will undoubtedly help considerably in reducing the large amount of decay of children's teeth and generally in improving their dental health.

Cigarette smoking continues to be a problem among school children. Although the association between cigarette smoking and lung cancer has been clearly shown, the consumption of cigarettes remains at a very high level. Good co-operation has been received from teachers, and the periodical meetings with the teachers' representatives and members of the administrative staff of the Education Department to consider health education matters are very useful. Among the subjects discussed at these meetings were the problems of venereal diseases and illegitimate pregnancies in school children. A letter was sent during the year to head teachers of secondary schools giving details of the increased incidence of venereal disease among adolescents and offering the services of a medical officer or health visitor to give a talk on venereal diseases in the schools.

The school medical service continued to receive very good co-operation from the Chief Education Officer and his staff, and I am very grateful for the continued support of the Chairman and members of the Schools Sub-Committee.

Principal School Medical Officer

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GENERAL INFORMATION

No. of pupils on registers of maintair	ned so	choo!	ls	24,571
Children attending:				
Nursery Schools				175
Primary Schools				14,844
Secondary Modern Schools				
Secondary Technical Schools				1,489
Secondary Grammar Schools				
Special Schools				429

The number of children attending primary schools included 940 children at 33 nursery classes held in 26 of the primary schools.

No. of schools maintained by the Authority	 		 93
Nursery Schools		2	
Primary Schools		64	
Secondary Schools		23	
Special Schools		4	

ARRANGEMENTS FOR TREATMENT AND SPECIAL EXAMINATIONS

Minor Ailments:

Consultation and Treatment Sessions-Doctor in Attendance

School Clinic	Day and Time of Commencement	No. of Sessions Weekly
Robert Galloway Clinic, Ward Street.	Tuesday and Thursday, 9.30 a.m.	2
Charles Street Clinic, off Folds Road.	Wednesday, 2.0 p.m. Saturday, 9.30 a.m.	2
The Withins School Clinic, Withins Lane, Breightmet.	Wednesday, 9.30 a.m.	1
Astley Bridge School Clinic, Moss Bank Way.	Thursday, 9.30 a.m. (Until 23.8.62) Tuesday, 9.30 a.m. (From 28.8.62)	1

Minor Ailment Treatment Sessions-Nurse only in Attendance

School Clinic	DAY AND TIME OF COMMENCEMENT	No. of Sessions Weekly
Robert Galloway Clinic,	Monday to Saturday,	6
Ward Street.	9.30 a.m.	
Charles Street Clinic,	Monday to Friday, 2.0 p.m.	6
off Folds Road.	Saturday, 9.30 a.m.	
The Withins School Clinic,	Monday, Wednesday and	3
Withins Lane, Breightmet.	Friday, 9.30 a.m.	
Astley Bridge School Clinic,	Tuesday and Thursday,	2
Moss Bank Way.	9.30 a.m.	

Treatment Centres with only a school nurse in attendance were conducted at the following schools:-

> Brownlow Fold Thursday morning Gaskell Street Wednesday afternoon Whitecroft Wednesday morning Monday, Wednesday and Havward

Friday morning

Dental Surgeries:

Six dental surgeries were in operation as follows:—

ROBERT GALLOWAY CLINIC 2 Surgeries Monday to Friday, 9.30 a.m. and 2.0 p.m. and Saturday at 9.30 a.m.

CHARLES STREET SCHOOL CLINIC Monday to Friday, 9.30 a.m. and 2.0 p.m. and Saturday at 9.30 a.m.

ASTLEY BRIDGE SCHOOL CLINIC 1 Surgery Monday to Friday, 9.30 a.m. and 2.0 p.m. and Saturday at 9.30 a.m.

THE WITHINS SCHOOL CLINIC (until 31st March) 1 Surgery Monday to Friday, 9.30 a.m. and 2.0 p.m. and Saturday at 9.30 a.m.

Aural Clinics:

The Consultant Aural Surgeon attended fortnightly at both the Charles Street School Clinic and the Robert Galloway Clinic to see by appointment school children who were referred by the school medical officers.

Ophthalmic Clinics:

The consultant ophthalmic surgeons attended at Charles Street Clinic and the Robert Galloway Clinic to examine by appointment children referred by school medical officers.

The clinics were held as follows:—

CHARLES STREET SCHOOL CLINIC

January to June, 1962

Tuesday afternoon 1 session weekly

ROBEET GALLOWAY CLINIC

January to December, 1962

Wednesday morning 1 session fortnightly

Monday afternoon Thursday afternoon 3 sessions weekly Saturday morning

Morning sessions commenced at 9.30 a.m. and afternoon sessions at 2.0 p.m.

Child Guidance:

The Child Guidance Clinic continued to be held at the Robert Galloway Clinic and was run on the same lines as in the latter part of 1961. Dr. A. Gage, a consultant child psychiatrist with the Manchester Regional Hospital Board, continued to attend on Tuesday mornings and Friday afternoons of each week.

A disquieting feature of the work of the child guidance clinic is the build-up in the waiting list which has taken place since Dr. Gage began to attend in November, 1961. This confirms the view which I expressed in my report for 1960 that there was considerable scope for a child psychiatrist in Bolton and that a great deal of work in this field was not being done at that time. Dr. Gage's appointment in 1961 brought about a considerable improvement in the facilities which were available in Bolton, but it is clear that the demand for psychiatric help is only partially met by the present facilities and additional sessions are needed. The number of child psychiatrists available is, however, insufficient to meet the current demands and our needs may not be fully met for many years.

Speech Therapy:

Two speech therapists were employed by the authority on a full-time basis during the earlier part of the year. One speech therapist resigned from full-time employment in September and continued on a part-time basis for the remainder of the year.

Audiometry:

Routine audiometric testing continued to be carried out in schools. When this practice was introduced in 1954 children were tested at the ages of seven and twelve years. In 1960 and 1961 priority was given to testing children in the younger age group in order to reduce the age at which this test was carried out to the earliest possible date after entry to school. This meant that during both of these years the testing of twelve year old children was not possible. By 1962 the younger children were being tested at the ages of five and six instead of at the age of seven, and testing of twelve year old children was resumed.

In addition to the routine testing, full audiometric examination is carried out on all children who have speech defects, or who are apparently backward, or are specially referred by medical officers.

During the course of the year a new portable audiometer was obtained and an additional school nurse trained in its use. This has made it easier to visit schools to carry out routine testing and the original audiometer is now permanently available at the Robert Galloway Clinic for special examinations.

Enuresis Clinic:

This has been the first complete year of the enuresis clinic and almost all the initial difficulties have now been overcome. The clinic has been held each Tuesday morning at the Robert Galloway School Clinic and attendances are by appointment only. One of the school medical officers who is particularly in-

terested in the problem of nocturnal enuresis, or bed wetting, is in charge of the clinic. Treatment has been mainly by the use of alarm beds. Children have been referred to the clinic by the Consultant Paediatrician, general practitioners, school medical officers, health visitors and head teachers. Priority has been given to older children, particularly to those over the age of ten years.

Nocturnal enuresis is a very distressing complaint and is more common among school children than is often realised. It is helpful to parents to be able to discuss this problem freely at school medical inspections and to be referred to a special clinic where the staff are interested and anxious to help.

During the year, fifty-one new patients attended the clinic. A full history was taken and urine examination carried out. Of these fifty-one new patients, twenty-three were cured after approximately three months treatment with an alarm bed and one was markedly improved but is still being followed up; a further five were cured after approximately six months treatment with an alarm bed; nineteen children were still under treatment at the end of the year, and three cases were apparently unimproved by treatment although there was some doubt about whether the alarm bed had been properly used in these cases.

The limiting factor in the work of this clinic has been the number of alarm beds available. During 1962 twenty-eight beds were available and this has not proved sufficient. As a result there is now a waiting list but additional alarm beds will be purchased in 1963 and it is hoped to reduce the waiting list.

The results obtained from the work of this clinic are very encouraging and an excellent example of positive and valuable work being carried out within the school health service.

Ultra Violet Light Treatment:

Ultra violet light therapy continued to be available in the Health Department on the same basis as in previous years and was given to those children for whom it was recommended by school medical officers.

Breathing Exercises:

The physiotherapist in the Health Department gave instruction in breathing exercises for children recommended for this treatment by school medical officers, chest physicians and the aural surgeon. She also gave instruction in breathing exercises to children attending Lostock Open Air School who were recommended for this treatment.

MEDICAL INSPECTION OF SCHOOL CHILDREN

The routine medical inspection of school children continued on the same lines as in previous years. Three inspections are carried out during the school life of each child—one on entry to school, one in the last year at primary school and one in the last year of attendance at a secondary school. Children attending special schools are inspected annually.

In my report for 1961 I discussed at some length the value of the routine examination of all primary school leavers. It is legitimate to question the need for this examination because a study of the results of the examination of primary school leavers during 1960 and 1961 showed that, apart from defective vision, almost fifty per cent of the defects which required treatment were, in fact, already receiving treatment and the remaining fifty per cent of defects which were not receiving treatment were of a less serious character than those which were being treated. Further, nearly all these defects which were not already receiving treatment could have been discovered or suspected from the history of the child and did not require a physical examination to bring them to light. It therefore seemed that the time was ripe to consider alternative schemes in place of the routine examination of all primary school leavers. A scheme for selective examination was therefore drawn up, the proposed procedure being as follows:

All children due for examination as primary school leavers would be seen by a school nurse who would carry out the usual vision testing and cleanliness inspection in all cases. In addition, all these children would have an audiometric examination.

A questionnaire would be sent to the parents of each child designed to elicit information about any possible defects. These questionnaires would be scrutinised by the school medical officer, who would arrange to examine any children whose parents had given answers which suggested that they were not in perfect health or might have some defect. In addition, the school medical officer would confer with the head teacher of the school and with the school nurse, and add to the list of children for examination any children who appeared to merit it in the light of the head teacher's or school nurse's knowledge of the children.

The children selected for examination in these ways would then be given appointments and seen by a school medical officer.

To ensure that this would be a satisfactory alternative to the routine medical examination of all primary school leavers, and that there was no likelihood of any child with a serious defect being missed, arrangements were made to test the selection procedure in two schools, Devonshire Road and Lever Edge Lane. This work will not, in fact, be carried out until 1963, but it has been arranged that in both these schools the selection procedure will be carried out and lists will be drawn up of those children who appear to merit examination and would be examined if the selection procedure was operating fully. The lists will then be set aside and the full medical examination of all primary school leavers will be carried out in the usual way. At the end of the year it will be possible to see whether, in fact, any serious defects existed in those children who were not selected for examination, and whether the selection procedure would have been satisfactory.

I am grateful to the headmasters of these two schools for their willing cooperation in this trial.

Periodic Medical Inspections

The total number of periodic medical inspections carried out in 1962 was 7,361, which was substantially less than the number carried out in 1961, namely 9,424. The number carried out in 1961 was, however, unusually high and arose because of fluctuations in the medical staff which resulted in an uneven distribution of work over the period. The number of inspections in 1962 was, in fact, very similar to the number in 1960 and in earlier years.

lumber of children inspecte	d:					
Entrants Primary School Leavers Senior Leavers						2,922
Primary School Leavers		٠.				1,940
Senior Leavers	• •	• •	• •	• •	• •	2,012
						6,874
Additional periodic inspec						407
(including Special Schools)	• •	• •	• •	• •	487
						7,361
Other E	xami	nati	ons			
						9 163
Special examinations Re-inspections	• •	• •	• •	• •	• •	6 153
Re-inspections	• •	• •	• •	• •	• •	0,155
						15,316

RESULT OF INSPECTIONS Periodic Inspections

The number of defects requiring treatment found at periodic inspections was 2,915, compared with 3,870 in 1961, a decrease of 955. The number of cases requiring observation fell from 2,824 in 1961 to 2,503 in 1962, a decrease of 321. The total number of children found to have defects was slightly less in 1962 than in 1961, but this is accounted for by the fact that a smaller number of children were examined in 1962. There has, however, been a slight shift in emphasis in that the number of children requiring treatment has shown proportionately a rather greater fall than the number of children requiring observation.

	1		D 1 11				1		
		Periodic Inspections							
Defect or Disease	Ent	rants	Others— Primary School Leavers Additional periodic inspections and Special Schools				TOTAL		
	Re- quiring treat- ment	Re- quiring obser- vation	Re- quiring treat- ment	Re- quiring obser- vation	Re- quiring treat- ment	Re- quiring obser- vation	Re- quiring treat- ment	Re- quiring obser- vation	
Skin	42	20	46	10	83	22	171	52	
Eyes: a. Vision b. Squint c. Other. Ears:	131 91 8	76 15 5	407 14 10	40 1 1	436 98 7	88 1 7	974 203 25	204 17 13	
a. Hearing b. Otitis Media c. Other. Nose and Throat Speech Lymphatic Glands Heart Lungs Developmental:	96 25 18 283 26 10 12 46	95 51 11 256 77 130 20 71	25 16 18 43 14 4 14 26	11 11 4 19 4 20 6	61 26 12 102 27 4 16 37	135 32 5 149 127 41 24 44	182 67 48 428 67 18 42 109	241 94 20 424 208 191 50 126	
a. Hernia b. Other	4 106	26 107	1 10	1 38	70	3 70	5 186	30 215	
Orthopaedic: a. Posture b. Feet c. Other Nervous System:	5 36 19	22 29 30	1 5 16	8 33 30	6 20 22	14 16 23	12 61 57	44 78 83	
a. Epilepsy b. Other	16 10	3 6	2 17	- 4	14 13	12 12	32 40	5 22	
Psychological: a. Development b. Stability Abdomen Other	8 8 18 34	28 30 14 14	4 4 5 30	1 8 2 17	8 10 12 47	192 42 16 22	20 22 35 111	221 80 32 53	
TOTALS	1,052	1,136	732	280	1,131	1,087	2,915	2,503	

Summary of Pupils found to require Treatment

Age Group Inspected (By year of birth)	For defective vision (excluding squint)	For any of the other conditions recorded in previous table	Total individual pupils
1958 and later	14	166	172
1957	59	375	396
1956	59	265	296
1955	18	49	56
1954	7	13	18
1953	4	17	18
1952	247	306	477
1951	108	118	202
1950	14	9	20
1949	6	10	13
1948	225	193	377
1947 and earlier	213	128	301
Totals	974	1,649	2,346

Special Inspections

The following table shows the number of defects found at special inspections.

	Special II	nspections
Defect or Disease	Requiring Treatment	Requiring to be kept under observation
Skin	317	38
a. Vision	35	16
b. Squint	6	1
c. Other	20	5
Ears:		
a. Hearing	122	98
b. Otitis Media	39	17
c. Other	61	14
Nose and Throat		48
Speech	18	6
Lymphatic Glands		3
Heart	7	10
Lungs	37	21
Developmental:		
a. Hernia	3	2
b. Other	43	21
Orthopaedic:		
a. Posture		2 7
b. Feet		
c. Other	43	13
Nervous System:		
a. Epilepsy		8
b. Other	33	17
Psychological:		
a. Development		12
b. Stability		23
Abdomen		15
Other	98	40
Totals	1,126	437

Presence of Parents at Periodic Medical Inspections:

Age Group Inspected	No. of pupils inspected	No. with parent present
Entrants	2,922	2,369
Primary School Leavers	1,940	1,371
Senior Leavers	2,012	248
Additional periodic inspections (including Special Schools)	487	247
TOTALS	7,361	4,235

Visits to the homes of children by school nurses:

The number of home visits paid by school nurses was 617, compared with 804 in 1961. These visits continued to be made for the same reasons as in the past; some were in connection with the cleansing of children who were found to be infested with vermin, and others were in connection with examinations made under Section 34 or Section 57 of the Education Act, 1944. Some visits were also made in connection with failure to attend clinics held either by the local authority or at the hospital.

MINOR AILMENTS

Attendances at minor ailment clinics continued to decline. The number of individual children attending school clinics and treatment centres was 2,614, a decrease on the previous year when the total number was 3,008. The total number of attendances showed a further substantial fall from 9,154 in 1961 to 7,828 in 1962.

The continuing decline in the work of the minor ailment clinics is a reflection of the improving health of school children.

Clinic or Centre	No. of individual children who attended	Children seen by medical officer on first visit	No. of subsequent visits to medical officer	Children seen by nurse on first visit	No. of subsequent visits to nurse	Total No. of Atten- dances
Robert Galloway	878	544	212	694	1,400	2,850
Charles Street	608	337	116	692	1,202	2,347
The Withins	363	302	86	259	600	1,247
Astley Bridge	192	164	25	85	126	400
Treatment Centres	573	-	nan.	573	411	984
Totals	2,614	1,347	439	2,303	3,739	7,828

The number of visits by school children to the treatment centres in schools was as follows:

Whitecroft			 		12
Gaskell Street			 		31
Brownlow Fol	d		 		367
Hayward			 		574
				-	
	To	TAL	 		984

NOTES ON SPECIFIC DEFECTS

Diseases of the Skin:

Twenty-six cases of scabies were treated during the year, compared with fifteen in the preceding year. It seems possible that the incidence of scabies is increasing but the numbers are still too small to justify any firm conclusion about this.

Once again, no cases of ringworm of the scalp were discovered during the year.

Disease			No. of cases treated or under treatment by the Authority
Ringworm: (i) Scalp (ii) Body Scabies Impetigo Other skin diseases			- 3 26 33 284
TOTAL	• •	• •	346

Impetigo treated in School Clinics:

The number of cases of impetigo treated in school clinics was 33 in 1962, compared with 34 in 1961. The table below gives the figures for the past ten years.

Year	No. of Cases	Year	No. of Cases
1953	74	1958	39
1954	120	1959	74
1955	76	1960	63
1956	43	1961	34
1957	32	1962	33

Defects of the Ear, Nose and Throat:

A total of 516 children had their tonsils and adenoids removed during the year; twelve had operations for diseases of the ear and five for other nose and throat conditions. One hundred and ten of these children were seen by the aural surgeon at the school clinics and referred to hospital for treatment, and 423 children were referred direct to the hospital for treatment.

Treatment

	Number of cases known to have been dealt with
Received operative treatment— for diseases of the ear for adenoids and chronic tonsillitis for other nose and throat conditions	12 516 5
TOTAL	635

Mr. G. Gordon Mowat, the Consultant Aural Surgeon, reports:

"The Specialist Aural Clinics have continued at weekly intervals for the past twelve months.

Regular treatment has reduced the incidence of chronic otitis media to minimal proportions and the main work of the clinic now consists of assessing minor degrees of deafness and examination of children with a view to removal of the tonsils and adenoids.

I would like to take this opportunity of thanking the nursing and administrative staffs of the clinics for their help and co-operation."

Ear, Nose and Throat Clinics

No. of visits by patients						548
No. of patients attending						393
No. of new patients						324
No. of children referred fro	om p	eriod	lic in	spect	tions	195
No. of children referred fro	om so	chool	clin	ics		197
No. of children referred from	om o	ther s	sourc	es		1

Children attending the clinics for the first time were seen for the following conditions, which may have been multiple in any particular child:

	Re			
Disease or Defect	Periodic Inspection	School Clinics	Other Sources	Total
Deafness Otitis Media Tonsil and adenoid abnormalities Catarrhal conditions Sinusitis Speech difficulties Other conditions	27 11 123 22 2 1 17	51 16 107 15 2 4 12	- 1 - - -	78 27 231 37 4 5 29
Totals	203	207	1	411

One partially hearing child was recommended for special educational treatment and admitted to the Thomasson Memorial School during 1962.

Seven children were recommended for attendance at the lip reading class.

The aural surgeon completed prescriptions for hearing aids in respect of four children.

One child was referred by school medical officers to Sir Alexander Ewing at the Department of Audiology and Education of the Deaf at Manchester University.

Pure Tone Audiometric Testing:

Pure tone audiometry was used for the routine examination of hearing in school children. A sweep test is carried out in schools as a method of selecting those children who may have defective hearing and children who fail the sweep test are invited to attend the school clinic for a full audiometric examination. During 1960 and 1961 testing was carried out only on children in the younger age group in order to reduce the age at which the examination was first carried out. In 1962 testing of older children was resumed and the practice was to test children at two ages, namely, at five or six years old and again at twelve. Three hundred and eighty-one children who failed the sweep test in 1962 were invited to the clinic for a full examination, and one hundred and forty-three of these children had an unsatisfactory full audiogram.

The early ascertainment of deafness in children is extremely important and the health visitors have continued to carry out screening tests for the ascertainment of deafness in pre-school children as part of the work undertaken by the Health Department. This work is very valuable in enabling deaf children to be referred for suitable education and guidance at an early age.

The following table shows the numbers of children in various groups tested at schools and tested at the clinics.

Sweep Testing in Schools

Sources of		Tested		Failed Test			
Children tested	Boys	Girls	Total	Boys	Girls	Total	
Ordinary Schools	1,002	971	1,973	142	125	267	
Secondary Modern and Technical Schools	460	472	932	50	64	114	
Totals	1,462	1,443	2,905	192	189	381	

Full Testing at the Clinics

	No. of	Await- ing	App't net		Result of Audiogram		Unsatisfactory Audiograms and Recommendations				
Source of Reference	children referred for test	app't for test 1962	kept for test	Satis- factory	Un- satis- factory	Change of position in class	For obser-	Repeat audio- gram	Treat- ment at the clinic	To Aural Sur- geon	
Failed sweep test in school School Medical Officers	381	6	69 27	163 132	143 128	24 18	68 31	18	2	31	
School Medical Officers on account of speech defect	93	_	6	78	9	-	5	2	-	2	
On account of backwardness	35	1	8	25	1	-	-	-	_	1	
Others: Aural Surgeon Headmaster Parent Family Doctor Health Visitors Paediatrician Educational Psychologist Repeat Audiograms	11 1 8 3 4 2	- - - - - 9	- - - - - 22	8 1 1 2 2 2	3 7 2 2 - -	1 - 3 1 - -	1 1 1 1 - - 20	1 - - - - - 12	1	1	
grams	128	9	22	41	26	8	20	12	1	13	
TOTALS	962	24	132	455	351	55	128	61	3	104	

Diseases of the Eye:

Altogether 1,971 children are known to have been dealt with for errors of refraction. Of these, 1,928 were refracted by the ophthalmic surgeons at the school clinics. The total attendances at the clinics numbered 3,683, of which 3,634 were for refraction, repairs to glasses and re-examinations, and 49 for diseases of the eye. Six children were referred to the Bolton Royal Infirmary.

In 239 cases spectacles were repaired or replaced.

Twenty-four children were referred to the ophthalmic clinic at the Bolton Royal Infirmary for treatment for squint.

Dr. T. Shannon Consultant Ophthalmic Surgeon attending at the Robert Galloway Clinic, reports:

"I am pleased to report that the work of the Robert Galloway Ophthalmic Clinic has been carried out during the past twelve months with its usual smoothness, thanks to the nursing staff and clerical staff and to the parents for their attendance and co-operation.

It is pleasing to note that it has been possible to cope with the waiting list and therefore children for review are seen without delay.

We continue to refer children with squint to the Orthoptist at the Bolton Royal Infirmary, and the majority of the parents co-operate with the task of occluding their children's eyes when advised."

Dr. T. Chadderton, Consultant Ophthalmic Surgeon attending at the Robert Galloway Clinic, reports:

"I am pleased to report that the Eye Clinics for the past twelve months have been satisfactory in that in the vast majority of cases the parents have attended with their children.

I have found, also, that with very few exceptions the glasses, when prescribed, have been worn.

All the cases of squinting children have been referred to the Royal Infirmary and those requiring operation have had this carried out.

I have received every co-operation from the staff, and the clinics have been run smoothly."

Cases of eye disease, defective vision or squint for which treatment was initiated by the school medical officers, may be analysed as follows:

	Number of cases known to have been dealt with
External and other conditions excluding errors of refraction and squint	31
Firms of refraction (including squint)	1,971
TOTAL	2,002
Number of pupils for whom spectacles were prescribed	1,142

The following were found at periodic medical inspection to require attention for defects of the eye:

Defect	Entrants	Primary School Leavers	Senior School Leavers	Additional Periodic Inspections and Special Schools	Totals
Defective Vision	131	342	407	94	974
Squint	91	69	14	29	203
Blepharitis	2	1	3	2	8
Conjunctivitis	1	1	_	-	2
Other	5	2	7	1	15

Orthoptics:

Children requiring treatment by an orthoptist continued to be referred to the orthoptic clinic at the Bolton Royal Infirmary as it has not been possible to recruit an orthoptist to do this work in the school clinics.

Defective Colour Vision:

As in previous years, the colour vision of secondary school leavers has been tested using the Ishihara method. In 1962 only twelve children were found to have defective colour vision, compared with forty-one in 1961. Ten out of these twelve children were, of course, boys.

Orthopaedic Defects:

One hundred and eighty-five children were found to have orthopaedic defects. One hundred and thirty of these were found on periodic medical inspection and the remaining fifty-five at school clinics. Twenty-eight children were referred to consultant orthopaedic surgeons at the Bolton Royal Infirmary for advice and treatment.

Chiropody:

The number of weekly sessions held by the chiropodist at the Robert Galloway Clinic remained at two throughout the year.

Miss Anne C. Drury, the Chiropodist, reports:

"The chiropody figures for 1962 are much lower than in previous years owing to my absence due to illness from June to August, which resulted in no chiropody clinics over that period. Unfortunately, on my return there was a waiting list of two months, but I am happy to report that by the end of the year this had been reduced to under a fostnight.

The foot conditions treated vary little from past reports, as shown in the table.

I am engaged at the present time in a Survey of Footwear, so have given particular attention to this factor in the Bolton children and find they are fairly typical of all children in the north-west. For example, footwear which is reasonably well fitting in five year olds is fair by the time they are ten and, in the girls especially, appalling by the time they are teenagers. It is quite easy to find girls with shoes that are actually smaller than the measured length and width of the foot.

A thorough re-education of manufacturers, retailers and customers seems to be indicated to enable fashion conscious teenagers to obtain shoes of adequate length and width at a reasonable price."

The number of children attending, and a summary of the defects treated, are given below:

		Boys	GIRLS
No. of new patients who attended the clinic Defects treated:	• •	77	158
Plantar Warts (Verrucae pedis)		24	48
Athlete's Foot (Tinea pedis)			4 10
Onychocriptosis (Ingrowing toe nails)			1
General chiropody treatment Hallux valgus	• •	4	19 5
Chilblains			4
Total number of treatments given		1,30	07

Cleanliness of School Children:

For the first time for several years there has been an appreciable improvement in the percentage of children with infested heads. This has fallen from 7.9 per cent in 1961 to 5.9 per cent in 1962. The nurses and health assistants have paid considerable attention to this problem and it is to be hoped that a further reduction will be achieved in the next few years.

During the year 101 children—38 boys and 63 girls—attended the Municipal Medical Baths at School Hill for vermin disinfestation and bodily cleansing.

Notices to Cleanse were issued under Section 54(2) of the Education Act in 36 cases, compared with 33 in 1961.

	1958	1959	1960	1961	1962
School population	25,437	25,373	25,311	25,271	24,571
No. of head inspections	50,199	56,184	54,720	49,318	53,167
No. of children with nits or vermin	1,907	1,923	1,775	2,021	1,456
Expressed as a percentage of school population	7.4	7.6	7.01	7.9	5.9

THE GENERAL CONDITION OF SCHOOL CHILDREN

Result of Routine Medical Inspection:

At the routine medical inspections the school medical officer concludes his medical report with a statement on the child's general condition, whether satisfactory or unsatisfactory. This classification, which was adopted nationally from the 1st January, 1956, has the merits of simplicity and practicability.

Of the 7,361 children examined at periodic inspections, 7,338 (99.69%) were satisfactory and only 23 (0.31%) were unsatisfactory, a very small percentage indeed. Details are given in the following table.

	No. of Pupils	Physical Condition of Pupils Inspected			
Age Groups Inspected		Satisfactory		Unsatisfactory	
(By year of birth) (1)	inspected (2)	No. (3)	% of Col. 2 (4)	No. (5)	% of Col. 2
1958 and later 1957 1956 1955 1954 1953 1952 1951 1950 1949 1948	661 1,408 881 135 56 44 1,402 672 45 34 1,210 813	658 1,399 878 133 55 44 1,400 671 43 34 1,210 813	99.55 99.36 99.66 98.52 98.21 100.00 99.86 99.85 95.56 100.00 100,00 100,00	3 9 3 2 1 - 2 1 2 -	0.45 0.64 0.34 1.48 1.79 - 0.14 0.15 4.44
TOTALS	7,361	7,338	99.69	23	0.31

The School Meals and Milk in Schools Scheme:

The percentage of school children during 1962 taking school milk under the above schemes 89.43	
No. of dinners produced in the school kitchens during	
1962	
Average number of children taking meals daily 12,155	
Percentage of school children taking dinners in school during 1962:-	
Expressed as percentage of average attendances 54.31	
No. of central kitchens	
No. of kitchen/dining rooms 37	
No. of children on free meals list at 31st December 1,470	

IMMUNISATION

Immunisation against diphtheria, tetanus and poliomyelitis continued on the same lines as in 1961. The only change was that during the course of the year Salk poliomyelitis vaccine, which has to be injected, ceased to be used and Sabin oral poliomyelitis vaccine was used in its place. This did not, however, involve any change in the programme as far as school children were concerned. Those children who had already been immunised against diphtheria, tetanus and poliomyelitis in infancy received one booster injection against diphtheria and tetanus combined and one dose of oral Sabin vaccine at the age of five years. Where a child has not been adequately immunised against diphtheria or tetanus or poliomyelitis in infancy, a suitable course of immunisations is arranged.

DENTAL HYGIENE

Report of the Principal School Dental Officer

Staff:

One full-time dental officer resigned during the year. Taking into account the appointment of a part-time officer at the end of 1961, this left the equivalent of slightly under five full-time officers against an establishment of eight.

Clinics:

The two surgeries at the Robert Galloway Clinic, two surgeries at Charles Street Clinic and one surgery at Astley Bridge were open throughout the year. Due to the loss of one full-time dental officer The Withins Clinic was operated only on a part-time basis in the latter part of the year.

Dental Inspections:

11,055 children out of a school population of 24,571 received a routine dental inspection. This reduction, compared to last year's total of 12,392, is related to the loss of a full-time dental officer.

Special inspections totalled 3,196 as against 3,389 last year.

Treatment:

5,193 children received treatment and were made dentally fit, this fitness being maintained by a six-monthly recall system.

The ratio of conservations of permanent teeth to extractions of permanent teeth was 3,006 permanent teeth conserved to 2,704 permanent teeth extracted, a ratio of 1.11. The 1961 ratio was 3,354 permanent teeth conserved to 3,048 permanent teeth extracted, a ratio of 1.10.

One hundred and ninety-three children received orthodontic treatment. Ninety-five of these were new cases and one hundred and fifty-one removable and four fixed appliances were fitted. Thirty patients were fitted with artificial dentures. One gold inlay and eleven crowns, comprising four gold post crowns, five porcelain jacket crowns and two dowel crowns, were fitted.

General anaesthetics were administered in 2,885 cases. Two hundred and thirty-one cases received a radiological examination and 339 X-ray films were taken. Other operations totalled 8,786, and included scaling and polishing, gum treatments, treatment of oral ulceration, dressings for the relief of pain, impressions, topical appliances of stannous fluoride and adjustments to orthodontic appliances. Two appliances were made to assist in speech therapy. Two appliances were made in co-operation with the plastic surgeon for a child with a severe bilateral cleft palate.

General Remarks:

Further progress has been made in the modernising of equipment. If the staffing position improves sufficiently, one additional surgery could be provided at Charles Street Clinic.

Dental Health Education:

A week's Dental Health Exhibition was held at the Bolton Technical College and attended by some 1,200 school children. Once again we were grateful to Dr. J. Miller of the Turner Dental School and to the six dental hygienists from Manchester Dental Hospital who assisted at the exhibition. Thanks are also due to Miss M. B. Nicoll, Principal Tutor of the Health Visitors' Training Course at the Bolton Technical College, who supplied flannelgraphs, to the Commonwealth Fruits Council for the provision of apples, and to the General Dental Council, Oral Hygiene Service, Unilevers and Public Relations Associates for the use of films, models, posters and leaflets. The help of head teachers and their staffs who co-operated in making the exhibition a success is also gratefully acknowledged.

The exhibition was identical with the one arranged in 1961 which was described at some length in my report for that year and was equally successful.

There is no doubt that health education has an increasing part to play in the battle against dental decay. If the younger generation could be thoroughly educated in the correct methods of oral hygiene, and if fluoridation of water supplies is adopted generally, the present gloomy picture of the state of the nation's teeth would be transformed and succeeding generations would not have to undergo the fantastic amount of operative dental treatment now required in what often proves to be a losing battle to preserve sound dentitions. There are a number of water supplies in this country which contain sufficient fluoride for the formation of sound teeth, but most water supplies, including Bolton's, are deficient in this substance. The artificial fluoridation of these water supplies has been shown, after extensive trials in the United States of America and in this country, to bring about a very marked improvement in children's teeth and to be quite harmless. Fluoridation of Bolton's water supplies would improve substantially the teeth of the future generation, and would have a marked effect even on the teeth of to-day's infants and toddlers. It is hoped that the Council will agree to the addition of fluoride to the water supplies in 1963.

I record with pleasure the appreciation of the Dental Department for the help received from the Chairman and the members of the Schools Sub-Committee, the Medical Officer of Health and the Chief Education Officer and their staffs, and again the willingness with which head teachers and their staffs cooperate in ensuring the smooth day-to-day working of the school dental service.

Dental Inspection and Treatment:

(a) DENTAL AND ORTHODONTIC WORK

I	Number of pupils inspected by the Authority's Dental Officers:										
	<i>i</i> At Periodic Inspections . <i>ii</i> As Specials			11,055 3,196	;}	Tota	al (I))	14,251		
II	Number found to require treatr	men	t						10,731		
III	Number offered treatment .								9,143		
IV	Number actually treated .								5,193		

"	DEN	TAL WORK (other than orthodontics)	
	I	Number of attendances made by pupils for treatment (excluding those recorded at (c)i below	13,278
	II	Half days devoted to:	
		i Periodic (School) Inspection 71 ii Treatment 2,022 Total II	2,093
	III	Fillings:	
		i Permanent Teeth	4,592
	IV	Number of Teeth Filled:	
		i Permanent Teeth 3,006 ii Temporary Teeth 1,272 Total IV	4,278
	V	Extractions:	
		i Permanent Teeth 2,704 ii Temporary Teeth 4,771 ii Total ii To	7,475
	VI	Administration of general anaesthetics for extraction	2,885
	VII		
	VII	Number of pupils supplied with artificial teeth	30
	VIII	Other operations:	
		i Permanent Teeth $6,625$ ii Temporary Teeth $2,161$ Total VIII.	8,786
	0.4	. 1	
)	Orth	odontics	
		i Number of attendances made by pupils for orthodontic treatment	914
		ii Half days devoted to orthodontic treatment	60
		iii Cases commenced during the year	95
		iv Cases brought forward from the previous year	98
		v Cases completed during the year	58
		vi Cases discontinued during the year	42
		vii Number of pupils treated by means of appliances	94
	7	viii Number of removable appliances fitted	151
		ix Number of fixed appliances fitted	4

INFECTIOUS DISEASES IN CHILDREN

Measles continued to be the infectious disease with the greatest incidence among children below school leaving age, although the total number of cases in 1962 was only 572, a very marked reduction on the number in 1961 which was 2,698. Most of these 572 cases occurred in the last few months of the year when the incidence of measles was rising steeply and they were, in fact, the initial cases in a winter outbreak of measles which extended from the last quarter of 1962 into the first quarter of 1963.

The notifications of scarlet fever continued to fall only 53 cases being notified during the year.

Only two cases of whooping cough were notified during the year. This is an exceptionally low figure, but the national incidence of whooping cough has been quite low during 1962 and it will be interesting to see whether this favourable trend is maintained in subsequent years.

There was only one case of poliomyelitis during the year in a child aged two.

There were two cases of paratyphoid fever among school children during the year. Both were members of the same family, and it is likely that the infection was acquired while abroad.

The incidence of dysentery was slightly but not significantly greater than in 1961.

The incidence of food poisoning continued to be low, only 20 cases being notified in comparison with 18 in 1961.

Incidence of Infection:

The number of cases of infectious diseases each month was as follows:

		Number of Cases											
Disease	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
Scarlet Fever	7 -	11 -	7 2 -	1 2 -	1 2 -	1 1 1 2	2 7 -	5 59 -	1 22 -	_	4 120 1	8 259 –	53 572 2
Pneumonia Poliomyelitis Paralytic	3	1	3	1 _	2	2	2	1	1 -	2	1	3	22
Non-Paralytic Enteric Fever (Paratyphoid B)	-	-	-	_	-	-	_	-	2	_	_	-	2
Dysentery Food Poisoning	8	23	59	23	21 -	53	19 1 -	3 -	2 2 2	6	8 7	3 -	226 20
Diphtheria	- - -	- - -	- - -	- - -	- - -	- - -	- -		- -	- - -	=		-

Age at Infection:

The age of the children at infection is shown below:—

Age																	
Disease	Un- der 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
C . 1 . F				10	1.5		,										
Scarlet Fever	16	63	6 78	10 86	15	9 121	3 74	19	8	2 6	3 5	1	1	3	-	_	53
Measles	10		/8		90	121		19	8	0)	_	1	3	1	_	572
Whooping Cough	4	3	2	1 2	3		2	3	1	_	_	_	-	-	2	_	2 22
Pneumonia Poliomyelitis	4	3	2	2	3	_	4	3	'	-	-	-	-	-	4	_	22
			1														1
Paralytic	-	-	1	-	_	_	_	_		_		_	_	-	_	-	1
Non-Paralytic Enteric Fever	-	_	_		_	_	_	_	_	-	-	-	_	-	-	-	_
(Paratyphoid B)		_	_	_			_	_			_	_	1				2
D	8	14	19	29	33	37	25	13	11	10	10	8	_	3	4	2	226
Food Poisoning	1 1	3	3	3	2	31	_ :	13	1 1	1	2	O	1		2	1	20
17 1 1	1	3	3	_	_			_	_	1			1	-	4	1	20
Think it will	-	_		H = 1	_	_	_	_	_	-	_	_	_	_	-	ы	_
Meningococcal	-					_	_	-	_	-	_	()	_	-	-	-	_
Infection	l	_		_	l _	_	_	_	_	_		_					
Acute Encephalitis	_					_		_									_
react Encephantis.																	

REPORT ON PHYSICAL EDUCATION

Physical education in all its branches has made steady progress during the year. The Annual Demonstrations in Physical Education were held in March and November and much enjoyed by the large number of teachers who attended.

Interest has been developed in wider fields. A Canoe Club has been formed and boys and girls meet once a week at Whitecroft County Secondary School swimming bath where they receive instruction, and a Week-end Course was organised at the Education Authority's Outdoor Centre in the Trough of Bowland.

Cross country running is increasingly popular, and badminton and table tennis clubs have been organised in several schools as after-school activities.

The Annual Netball Rallies, Swimming Galas and Inter-School Sports reached a high standard and were much enjoyed by all who took part. In the Annual Swimming Competition for the awards offered by the Humane Society for the Hundred of Salford both special awards were gained by a Bolton boy and girl.

THE WORK OF THE CHILD GUIDANCE CENTRE

Dr. A.Gage, the Consultant Child Psychiatrist at the Child Guidance Centre, reports:

"Although some of my time has been occupied in lecturing and participating in group discussion, most of the work done in the clinic has been concerned with the examination and treatment of the children referred to me.

On the 1st January there were fifteen children on the waiting list. During 1962, 86 children were referred from the following sources:

School Medical Officers	 	 	 38
Educational Psychologist	 	 	 26
Paediatrician	 	 	 7
General Practitioners			
Others			

Of these 86 children, seven were under school age.

The total number of children examined was 51 (and of these seven were under school age). The number of children remaining on the waiting list on 31st December, 1962 was 42 as eight had been removed for various reasons.

After the initial diagnostic interview children were either taken on for treatment, being seen at weekly or fortnightly intervals, or they were reviewed at intervals of one to three months. In a few cases it was felt that the problem could be dealt with at one or two interviews only.

Advice and review at longer intervals		- 11						
Advice only		10						
Placement away from home								
(This last figure is inflated due to the	fact	that						
in that group are three children who were attending								
boarding schools before I saw them).								

I acknowledge with gratitude the help I have received from the Educational Psychologist and from the Psychiatric Social Worker in the diagnosis and treatment of these children.

Because of the length of the waiting list I am seeing only the very disturbed children now. If the present rate of referral continues I estimate there will be sufficient work to occupy me for at least another two to three sessions per week, with a corresponding increase in the number of Psychiatric Social Worker sessions and continued help from the Educational Psychologist."

Mrs. M. A. Spencer, the Educational Psychologist at the Child Guidance Centre, reports:

"This has been the first year for some time that the clinic has had the services of a Consultant Psychiatrist on a permanent basis. The social worker/psychologist team has acted as a screen, so that only those children most in need of psychiatric help are referred to Dr. Gage. Twenty-six such children have been referred in the course of the year. In addition, the

psychologists have tested and assessed 27 children who were referred direct to the Consultant Psychiatrist by general practitioners, school medical officers, etc.

During the year, 150 children have been referred to the Child Guidance Centre without a specific request for psychiatric help. The main reasons for referral were:

	No. of
	Cases
Backwardness in school	 67
General behaviour problems	 37
Behaviour problems, primarily in the home	 17
Behaviour problems, primarily at school	 19

The main sources of these referrals were from head teachers (73 cases) and from school medical officers (40 cases).

One major advance this year has been the opening of the special Observation Class for children of infant school age. The class began in January with eight children. Two children were able to leave after two terms, one for Woodside Junior School and one for the Junior Training Centre. Three children were included later in the year. It seems likely that the projected maximum of ten children in the class will be adequate to cope with the demand for places.

The Remedial Teaching Service is continuing, though because of the shortage of teachers it has been necessary to adopt a policy of giving an adequate amount of remedial help to a small number of children, particularly in the primary schools. Two editions of the Remedial Service Bulletin have been produced this year."

HANDICAPPED PUPILS

One of the most important duties of the School Health Service is to advise the authority on the ascertainment of handicapped pupils. These are pupils who, because of some physical or mental disability, require special educational treatment if they are to obtain the maximum possible advantage from education. Correct ascertainment and placement is of considerable importance to individual pupils.

As far as possible, children are retained in ordinary schools unless their handicap is so severe that this would not give the child the best possible education.

The examination of children who are ascertained as educationally subnormal is carried out by medical officers who have attended a prescribed course in this work and have fulfilled conditions laid down in The Medical Examinations (Sub-normal Children) Regulations, 1959. At the beginning of the year two full-time medical officers and two part-time medical officers, having fulfilled the requirements of the regulations, were able to undertake this work. During the course of the year one of the two full-time medical officers resigned, but arrangements have been made for another full-time officer to attend a qualifying course in 1963.

Ascertainment in 1962

The following children were ascertained as in need of special educational treatment as handicapped pupils during the year:

Blind					 	
Partially Sighted					 	3
Deaf					 	_
Partially Hearing					 	8
Educationally Sub-	norn	nal			 	26
Epileptic					 	5
Maladjusted					 	2
Physically Handica	pped				 	1
Pupils suffering fro	m Sp	eech	Defe	ects	 	102
Delicate					 	47
					-	
	To	DTAL			 	194

Children in Special Schools:

At the end of the year there were 336 handicapped pupils receiving special educational treatment in special schools. Details are given in the following table:

HANDICAP	SPECIAL SCHOOLS		O. OF PU	JPILS Day
BLIND	Henshaw's Institute for the Blind, Manche Chorleywood College, Herts Liverpool School for the Blind Condover Hall, Shrewsbury	ester	1 1 1 1	- - -
PARTIALLY SIGHTED	Preston School		1 2 - 1	- 8 -
DEAF	Thomasson Memorial School, Bolton Mary Hare Grammar School, Newbury		- 1	14
Partially Hearing	Thomasson Memorial School, Bolton		4	10
DELICATE	Lostock Open Air School, Bolton		75	-
PHYSICALLY HANDICAPPED	Birtenshaw Hall School, Bromley Cross St. Rose's School, Stroud, Glos Bleasdale House School, Silverdale Children's Convalescent Home, West Kirk	 	1 1 1 2	8 -
EDUCATIONALLY SUB-NORMAL	Woodside School, Bolton Stone Cross, Ulverston	• • • • • • • • • • • • • • • • • • • •	- 1 1 1 -	184 - - - 1
Maladjusted	Wennington School, Wetherby, Yorks Blue Coat School, Liverpool St. Thomas More's School, Devon Drayton Manor St. Laurence's, St. Leonards-on-Sea Dunsterville, Rochdale		1 1 6 1 1	- - - -
EPILEPTIC	Colthurst House School, Alderley Edge Soss Moss School, Chelford St. Elizabeth's School, Much Hadham		1 1 2	- - -
	Totals		111	225
	Total		33	6

Children awating placement in Special Schools:

The following pupils were ascertained as in need of special educational treatment, but at the end of the year arrangements for accommodation had not been completed:

Partially S	Sight	ed				 	 1
Physically	Hai	ndica	pped	l		 	 1
Education	ally	Sub-	norn	nal		 	 9
Epileptic						 	 4
Maladjust	ed					 	 6
Delicate						 	 11
				To	TAL	 	 32

Total number receiving or needing special school accommodation .. 368

Special Schools in Bolton:

WOODSIDE DAY SPECIAL SCHOOLS FOR EDUCATIONALLY SUB-NORMAL CHILDREN:

The numbers of children on the rolls, and those admitted and discharged, were as follows:

Woodside Senior School:

From the Bolton Area:	Boys	GIRLS
No. of children on the roll, December, 1962	59	34
No. of children admitted during 1962	15	8
No. of children who left during 1962	13	4
From Outside Areas:		
No. of children on the roll, December, 1962	5	5
No. of children admitted during 1962	1	2
No. of children who left during 1962	2	1
Woodside Junior School:		
	-	0

From the Bolton Area:	Boys	GIRLS
No. of children on the roll, December, 1962	54	37
No. of children admitted during 1962	12	10
No. of children who left during 1962	14	12

From Outside Areas:

No. of children on the roll, December 1962	 4	5
No. of children admitted during 1962	 _	1
No. of children who left during 1962	 2	2

One of the medical officers who is approved for the purposes of ascertaining educationally sub-normal children attends these schools regularly.

Children leaving Woodside Senior School at the age of 16 years who are thought to require further supervision are reported informally to the local health authority.

THOMASSON MEMORIAL DAY AND RESIDENTIAL SPECIAL SCHOOL FOR DEAF AND PARTIALLY HEARING CHILDREN

Pupils were admitted from our own and other authorities' areas. With a few exceptions the children who lived in Bolton or nearby attended as day scholars; the remainder were resident.

The Consultant Aural Surgeon pays regular visits to the school. A school medical officer also paid regular visits.

The numbers of children were:

From the Bolton Area:	Boys	GIRLS
No. of children on the roll, December, 1962	16 -	12 1
No. of children who left during 1962	1	3
From Outside Areas:		
No. of children on the roll, December, 1962	53	30
No. of children admitted during 1962	14	7
No. of children who left during 1962	6	1

LOSTOCK RESIDENTIAL OPEN AIR SCHOOL FOR DELICATE CHILDREN:

The open air school continued on the same lines as in previous years. During 1962, 116 children in the school, were from the Bolton area and 61 from outside areas, principally Lancashire County. This compared with 103 children from Bolton and 82 from outside areas in 1961.

The school continues to be useful for children suffering from a variety of conditions and, apart from general debility, asthma is the principal single entity concerned.

A school medical officer visits the school each week, and the children are cared for by a local general practitioner when they are ill.

The following table gives details of the number of children in attendance, admitted and discharged during the year.

	Boys	GIRLS
From the Bolton Area:		
No. of children on the roll, December 1962 No. of children admitted during 1962 No. of children discharged during 1962	 34 18 18	41 23 17
From Outside Areas:		
No. of children on the roll, December 1962 No. of children admitted during 1962 No. of children who left during 1962	 34 16 21	7 4 9

An analysis of the medical conditions of the children who were in residence during the year is given below:

					No. of Children				
Medic	AL (Cond	OITIO	N	Во	LTON	OUTSIDE	AREAS	
Asthma					 1	19	25		
					 1	14	7		
					 1	l 1	3		
Poor nutritional stat					 	5	1		
General debility					 3	34	10		
Other conditions					 3	33	15		
					-	_	_		
					11	16	61		
					_				

Children in other Special Schools:

A number of Bolton children who are handicapped and who cannot be suitably educated in the special schools provided in Bolton attend residential schools in other parts of the country. These children are examined by the authority's medical officers during the school holidays when they return to Bolton so that progress can be assessed, and if there is any change in the child's disability an appropriate recommendation can be made.

Children suffering from Cerebral Palsy:

As far as possible, spastic children whose physical disability is slight and whose intelligence level is adequate are encouraged to attend an ordinary school. The majority of spastic children from Bolton whose physical disability makes them unfit for ordinary school attend Birtenshaw Hall Special School for Spastic Children. The admission and discharge of these children is the responsibility of the Medical Advisory Panel, which meets from time to time to consider applications.

Altogether there were 34 children known to the School Health Service to be suffering from cerebral palsy. The situation at the end of the year was as follows:

	Boys	GIRLS
Attending Birtenshaw Hall Special School	2	7
Awaiting admission to Birtenshaw Hall Special School	-	1
Attending special school for partially sighted children	1	-
Attending special school for educationally sub-normal	1	2
Attending ordinary schools	6	5
Not at school—pre-school children	8	1
		_
Totals	18	16

Children unable to attend school because of Physical Disabilities:

The service of home teachers was needed for 24 children. The conditions necessitating this service were as follows:

	Boys	GIRLS
Rheumatic diseases	2	1
Arthritis	1	_
Congenital abnormalities	2	5
Asthma	1	1
Epilepsy	1	_
Leukaemia	1	_
Muscular dystrophy	1	1
Convalescence	4	_
Maladjustment ("School phobia")	_	1
Other conditions	1	1
Totals	14	10
	_	

Nine boys and six girls who had suffered from the conditions mentioned below were taken off the peripatetic teachers' list.

RESUMED ATTENDANCE	AT (Ori	OINAR'	y Sci	HOOL	.:	Boys	GIRLS
Rheumatic diseases							1	1
Asthma							1	1
Congenital abnorma	alitie	S					_	3
Convalescence							3	_
							1	1
DECEASED:								
Leukaemia							1	-
OVER SCHOOL AGE:								
Arthritis							1	_
LEFT THE TOWN:								
Haemophilia							1	_
*								_
			To	TALS			9	6
								_

Co-operation with the Youth Employment Service:

Handicapped pupils may encounter difficulties in obtaining or keeping employment after they leave school and to assist the Youth Employment Officers in placing these children school medical officers provide advice on Forms Y.9 or Y.10, which are sent to the Youth Employment Officer.

FORM Y.9

This form was completed in respect of 42 children and was used for children who had relatively minor defects and who were not likely to need registration under the Disabled Persons (Employment) Act, 1944. The conditions for which this form was used are given in the following table:

					Boys	GIRLS
Defective colour vision				 	10	2
Asthma				 	1	1
Defective hearing				 	9	4
Defective vision				 	1	_
Defective vision and renal	abn	orma	ality	 	1	_
Epilepsy				 	1	2
Heart condition				 	1	-
Disability of limb				 	1	3
D 111				 	1	_
Diabetes				 	2	-
Post chorea				 	1	
Skin condition				 	_	1
					_	
		To	TALS	 	29	13

FORM Y.10

This form is used where children are sufficiently severely handicapped to make a registration under the Disabled Persons (Employment) Act, 1944 a possibility. In 1962 this form was issued in respect of eleven children, compared with only one in 1961. All these eleven children were, however, attending special schools, residential schools, or in one case, were out of school.

This form is not completed unless the parent is willing to sign a declaration stating that the nature of the disability may be revealed to the Youth Employment Officer. Generally speaking, it is to the advantage of the child that the handicap should be declared at this stage as failure to do so may lead to unsuitable employment and, eventually, to unemployment.

Leavers from-	Form Y	.9 comple	ted for-	Form Y.10 completed for-		
Leavers from-	Boys	Girls	Total	Boys	Girls	Total
Through Schools	. 2	_	2	_	-	-
Secondary Modern Schools .	. 19	6	25	-	-	-
Art School	. –	1	1	_	_	-
Technical Schools	. 1	1	2	_	-	_
Grammar Schools	. 1	1	2	_	-	-
Special Schools	. 5	3	8	5	2	7
Residential Schools	. 1	1	2	1	2	3
Out of School		-	-	_	1	1
Totals	. 29	13	42	6	5	11

Speech Therapy:

The following is a report on the work of the two speech therapists.

Speech therapy has been provided at the main speech therapy clinic throughout the year, at Woodside School for educationally sub-normal children until July, 1962 and at Lever Edge Lane Observation Class from September, 1962.

The present position as regards treatment for children is serious. Until September, 1962 there were two full-time therapists, but in September one therapist resigned her full-time appointment and took up part-time duties, leaving one full-time and one part-time therapist for a school population of 24,571. This figure excludes Direct Grant Grammar schools.

The numbers on the official waiting list are not indicative of the seriousness of the position, for in addition to those listed there are children requiring speech therapy who have not yet been referred.

The proportions of different types of defect remain similar. Stammerers accounted for 19 per cent, dyslalia and retarded speech development made up 73 per cent. The remaining 8 per cent were those whose speech defect was a result of physical handicaps, i.e. cerebral palsy, cleft palate, partial deafness, voice defects, and one case suffering from dyslexia, dysgraphia and dyspraxia.

Children have been referred from head teachers, school medical officers, psychologists, the psychiatrist and consultants. Children have been referred to various consultants, i.e. surgeons, neurologists, psychiatrist, etc.

A school medical officer has attended regularly at the Speech Therapy Centre.

Number of cases treated per week		 	116
Number of cases treated at Woodside		 	56
Number of cases treated in the Observation Cl	lass	 	6
Number of cases admitted		 	62
Number of cases discharged		 	60
Number referred to Consultants		 	6
Number referred to Child Guidance Clinic		 	12
Number interviewed in the Clinic		 	104
Total Number of attendances		 	1,898
Number on Waiting List		 	74

Lip-Reading Classes:

Two Lip-Reading Classes were held each week at the Education Sub-Office, Mawdsley Street. Two qualified teachers of the deaf were in charge of the Centre and eleven partially hearing children attended. These children were ascertained as partially hearing and needing special educational treatment.

EXAMINATIONS UNDER SECTIONS 34 AND 57 OF THE EDUCATION ACT, 1944

Approved medical officers of the authority carried out examinations under the above sections of the Education Act, 1944 of children who were not making satisfactory progress at school. In twenty-six cases it was recommended that the children be ascertained as educationally sub-normal and that special educational treatment should be provided. In nine cases the children were found to be unsuitable for education at school.

One person exercised the right of appealing to the Minister of Education in respect of a child ascertained under Section 57, but the Authority's decision was upheld.

The children who were found to be unsuitable for education at school were notified to the local health authority. In most cases these children were recommended for training in the Training Centre provided by the local health authority.

ADDITIONAL REPORTS

Physiotherapy:

ULTRA-VIOLET LIGHT TREATMENT:

Ultra-violet light treatment was continued at the Health Department throughout the year. The number of children attending in 1962 was 126, compared with 109 in 1961.

The conditions for which medical officers recommended children for treatment are shown in the following table:

Nasal catarrh			 	 28
Frequent colds			 	 30
Bronchial catarrh			 	 1
Recurrent bronchitis	S		 	 6
Underweight			 	 3
General debility			 	 6
Skin conditions			 	 1
Asthma			 	 4
Frequent coughs			 	 23
General conditions			 	 24
	T	OTAL		 126

The treatment was given by a qualified physiotherapist.

Breathing Exercises:

The physiotherapist in the Health Department undertook the treatment of eight boys and eight girls recommended by school medical officers for breathing exercises.

She attended twice a week at Lostock Open Air School to give ultra-violet light treatment, and she also attended once a term to instruct the children in breathing exercises and arrange the postural drainage and percussion treatment of the children with bronchiectasis.

Twenty-six children—14 boys and 12 girls—were recommended by the school medical officers for physiotherapy for the following conditions:

				Boys	GIRLS
Genu valgum			 	1	2
Flat feet			 	9	7
Valgus feet			 	3	2
Posture			 	1	1
					_
	Тота	LS	 	14	12

Mortality in School Children:

Ten children of school age died during the year. This is less than in 1961 when fourteen children died, or 1960 when fifteen children died, but the numbers are so small that fluctuation from year to year is to be expected, and this does not mean that there has been a significant improvement.

Of the ten deaths, seven were from natural causes. One child died from drowning, and two died as a result of road accidents.

Health Education:

CIGARETTE SMOKING AND LUNG CANCER:

The efforts which began during 1960 to make children in the secondary schools aware of the association between cigarette smoking and lung cancer were continued during 1962. Leaflets were distributed to the parents of all children reaching secondary school age, setting out the facts in a brief form, and fresh supplies of posters are distributed to the schools from time to time. Occasional meetings are held with representatives of the teachers, and these meetings are extremely useful in dealing with this and other health education topics.

VENEREAL DISEASES:

Since 1954 there has been a progressive increase in the incidence of venereal diseases in England and Wales, and one particularly disquieting feature of this increase is that it is relatively much greater among adolescents than among the older age groups. It has been noted by medical officers that many young people who acquire venereal diseases have no idea of what they are or what their consequences may be. There appears to be a need for wider knowledge among adolescents of the risks of venereal diseases and their consequences. This is, however, only one aspect of the much larger problem of sexual behaviour among adolescents and it is difficult to deal with venereal diseases in isolation. Nevertheless, a letter was sent during the year to the head teachers of secondary schools giving details of the increasing incidence of venereal diseases among adolescents and offering the services of a medical officer or health visitor to give a talk on venereal diseases in the schools.

THE CARE OF CHILDREN ATTENDING NURSERY SCHOOLS, NURSERY CLASSES AND SPECIAL SCHOOLS

Nursery Schools:

School medical officers visited nursery schools and classes throughout the year and the school nurse made monthly visits to the nursery schools.

The following are the relevant statistics:

KAY STREET NURSERY SCHOOL:

No. of children on the roll, December 1962	 	84
No. of children admitted during 1962		30
No. of children transferred to primary schools	 	29
No. of children removed by parents	 	1
PIKES LANE NURSERY SCHOOL:		
No. of children on the roll, December 1962	 	96
No. of children admitted during 1962	 	46
No. of children transferred to primary schools	 	38
No. of children removed by parents	 	8

Nursery Classes:

P

Medical examinations were carried out at the 33 nursery classes at which 940 children were in attendance.

Special Schools:

Monthly visits were paid by school medical officers to Woodside School, and weekly visits to Lostock Open Air School. The Consultant Aural Surgeon visits Thomasson Memorial School periodically throughout the year.

Results of Periodic Medical Inspection at Special Schools:

	Special Schools					
Defect or Disease	Woods (E.S.		THOMASSON MEMORIAL (Deaf & Partially Deaf)			
	Requiring treatment	Requiring observation	Requiring treatment	Requiring observation		
SKIN	15	2	3	-		
Defective vision	44	16	26	2		
Squint	9	_	10	-		
Other	2	-	1	_		
EARS:						
Defective hearing	6	9	4	104		
Otitis media	3	8	3	3		
Other	_	-	3	-		
NOSE AND THROAT:						
Nasal catarrh	9	21	3	16		
Tonsil and adenoid abnormalities	2	9	3	4		
Speech Abnormalities	14	10	-	104		
LYMPHATIC GLANDS	-	8	-			
HEART	$\frac{1}{2}$	3	-	2 6		
LUNGS	1	3	5	6		
DEVELOPMENTAL:						
Hernia	-	-	-	- (
Other	6	3		6 6		
ORTHOPAEDIC:						
Posture	-	2	4	1		
Flat Feet	1	-	4	1		
Other	3	6	1	1		
NERVOUS SYSTEM:						
Epilepsy	5	-	-	1		
Other	-	-	1	2		
PSYCHOLOGICAL:						
Development	2 2 6	172	-	6		
Stability	2	16	7	2 2		
OTHER DEFECTS OR DISEASES	6	_ 4	4	2		
TOTALS	132	292	75	263		

EMPLOYMENT OF CHILDREN

Five hundred and forty-eight children were examined for employment outside school hours. The type of employment was as follows:

					No. of Children
Newspaper delivery				 	529
Shop or Store Assistants				 	11
Milk Delivery				 	4
Grocers' Assistants				 	4
	Т	TAL	,	 	548

All the children were passed as being medically fit for employment.

MEDICAL INSPECTION OF PUPILS ATTENDING DIRECT GRANT AND INDEPENDENT GRAMMAR SCHOOLS

School medical officers carry out routine medical inspection of pupils attending one direct grant grammar school and one independent grammar school in the borough. The following table shows the number of pupils inspected and the number found to require treatment.

		Pupils foun- treat	Total	
Age Groups Inspected (by year of birth)	Number of pupils inspected	for defective vision (excluding squint)	for other conditions	individual pupils with defects
1957 and later 1956 1955 1954 1953 1952 1951 1950 1949 1948	4 8 3 - - - 8 9 - 99	1 - - - - 1 5 - 39	- 1 - - - - - 4 - 10	1 - - - - 1 8 - 44
Totals	131	46	15	54









